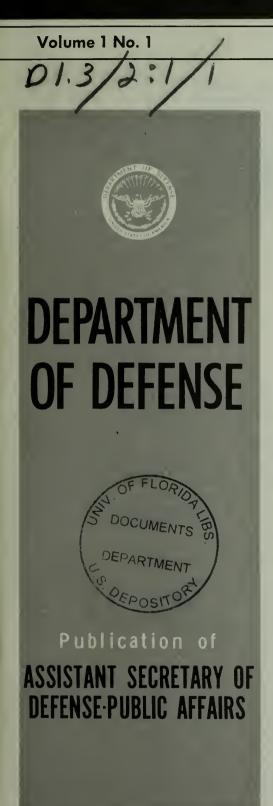
FENSE INDUST



DOCUMENTS DEPARTMENT
UNIVERSITY OF FLORIDA LIBRARIES
GAINESVILLE, FLORIDA

1	THIS	ISSUE					
			GAIN	ESV	LLE, FL	ORIDA	
		UNIVE	RSITY	0F	FLORID	A LIBRAR	(IE

The Defense Market Place	1
Navy Kicks Off Deep Submergence Program	1
Improvements in Contracting Explained by	
AF's Gen. Gerrity	5
DOD Reports Reduction in ASPR Implementation	10
DIAC Meets To Hear Progress Reports 155	17
Defense R&D Expands Work With Allies	17
Departments	
About People	7
Meetings & Symposia	9
Speakers Calendar	11
From the Speakers Rostrum	13
Bibliography	19
Notes for Editors	20
Calendar of Events	21
Defense Procurement	22

TO THE MEMBERS OF THE **DEFENSE INDUSTRY TEAM**



The Defense Industry Bulletin is designed to assist American Industry in responding to Department of Defense requirements.

January 1965

We have in being today all the weapons and equipment needed to keep us safe from armed aggression. We will have them tomorrow, and the day after tomorrow.

That this is true is due in large part to

the steadily increasing cooperation between the Department of Defense and Industry-both management and labor. But I am confident that we can work more closely together, and I am determined that we in the Department of Defense will do everything possible to achieve this end.

Publication of the Defense Industry Bulletin to communicate more effectively our policies and plans and define more precisely what we need to accomplish them is a step in that direction.

Ants- Nack

Secretary of Defense



INDUSTRY DEFENSE

Published by the Department of Defense

Hon. Robert S. McNamara

Secretary of Defense

Hon. Cyrus R. Vance

Deputy Secretary of Defense Hon. Arthur Sylvester

Assistant Secretary of Defense (Public Affairs)

Col. J. B. Cross, USAF
Director for Community Relations

Col. Edwin C. Gibson, USA Chief, Business & Labor Division Lt. Col. Sheldon Hicks, USA

Chief, Business Branch and Editor-in-Chief

LCdr. E. W. Bradford, USN Editor___LCdr. E. Assoc. Editor____ Mr. Rick LaFalce Assoc. Editor____ Miss Cecilia Pollok Editorial Asst.__Mrs. Fran Faulkner

The Defense Industry BULLETIN is published monthly by the Business & Labor Division, Directorate for Community Relations, Office of the Assistant Secretary of Defense (Public Affairs). Use of funds for printing this publication was approved by the Director of the Bureau of the Budget.

The purpose of the *BULLETIN* is to serve as a means of communication between the Department of Defense (DOD) and its authorized agencies and defense contractors and other business interests. It will serve as a guide to industry concerning official policies, programs and projects, and will seek to stimulate thought by members of the defense-industry team in solving the problems that may arise in fulfilling the requirements of the

Material in the BULLETIN is selected to supply pertinent unclassified data of interest to the business community. Suggestions from industry representatives for topics to be covered in future issues should be forwarded to the Business & Labor

Division.

The BULLETIN is distributed each month to the agencies of Department of Defense, Army, Navy, and Air Force, and to representatives of industry. Request for copies should be addressed to the Business & Labor Division, OASD/PA, Room 2E813, The Pentagon, Washington, D.C. 20301.

Contents of the magazine may be reprinted freely without requesting permission. Mention of the source will

be appreciated.

Sec. Sylvester Sees Benefit To Industry In New Bulletin

Following consolidation in my office last July of the industry liaison functions of the Military

Departments, a study was initiated to find the best packaging that can be devised to expedite public dissemination of defense information of interest to industry. By its overwhelming response to our study ques-

tionnaire, industry played an important part in helping develop a solution to the problem.

The result is this, the first issue of the Defense Industry Bulletin. The Bulletin is aimed

> at serving your needs and we naturally look to you to help us guide its future course. Your comments will always be welcome.

> I am confident that publication of the Defense Industry Bulletin

will contribute significantly to a stronger, integrated defenseindustry team.

arthur Splies &

Assistant Secretary of Defense (Public Affairs)

BUSINESS-LABOR DIVISION—NEW OFFICE IN DOD PUBLIC AFFAIRS

As indicated in the masthead on this page, the Defense Industry Bulletin is published by the Business and Labor Division of the Directorate for Community Relations in the Office of the Assistant Secretary of Defense for Public Affairs (OASD/PA).

The Community Relations Directorate consists of three functional divisions. In addition to the Business and Labor Division, they are the National Organizations Division and the Projects Division. The Business and Labor Division's primary area of responsibility is industry -both management and labor. The National Organizations Division, on the other hand, is responsible for assisting all national organizations less those that are industry and labor oriented.

In the words of Colonel Julian B. Cross, USAF, the Director for Community Relations, "The services of the whole Directorate,

along with those of the entire OASD(PA), are available to business and labor, and all of us are anxious to be of assistance in every way possible. A call to the Business and Labor Division will bring the necessary resources into play."

It is the mission of the Directorate for Community Relations to bring about the broadest possible public understanding and support of the objectives, accomplishments, programs, and activities of the Department of Defense.

Methods utilized to accomplish this objective include continuous liaison, cooperation, and coordination with interested elements of the American public on matters of mutual concern.

The names, locations and telephone numbers of officials, division and branch chiefs within OASD(PA) are listed on page 18.

The Defense Market Place

Defense Industry—the market place where Army, Navy, Air Force and Defense Supply Agency buy — is playing an increasingly important part in the overall defense effort.

The term "Defense Industry" is difficult to define. There is no typical firm. Rather it is a composite of many different kinds of firms from different walks of economic life. It is prestige corporations and one-man shops; old established firms with roots deep in defense production and new arrivals seeking to displace the old. And it is countless others whose entry into the market place is sporadic depending upon the desire and ability to compete. However, one might say-if pressed for a definition —that defense industry includes any firm whose product goes into the military market-basket, be it hardware, services, material or research and development.

The hard core of the industry -that segment involved in the research, development and production of "major hard goods" -has mushroomed into importance only in recent years. Before World War II weapons were produced largely in government arsenals. Except in times of war private enterprise played a relatively small part in weapons-making. But events after World War II-the international climate and the growing complexity of weapons—have created a different environment.

The postwar era philosophy has been to go to industry and have industry develop and produce the necessary hardware for defense. Today we depend heavily on industry for the job of weapons-making. The best evidence of this is that defense industry has become a \$25 billion a year business.

The peak since World War II was the Korean War year of 1952 when military procurement totalled \$43.6 billion. Post Korea cut-backs and adjustments reduced the net procurement to \$13.3 billion in FY 1954. From that low point annual spending increased steadily to \$25.3 billion in FY 1959. Following a cut-back to \$23.7 billion in FY 1960, procurement rose again to present levels of \$28.8 billion in FY 1964.

A better handle on how procurement dollars are spent in the defense market place is provided by Table 1. Table 1 shows the FY 1964 DOD contract awards by procurement programs and indicates for each the amount of dollars spent for research and development.

TABLE 1

DOD Contract Awards by Procurement Program, Including R&D—for FY 1964 (in millions).

Major Hard Goods

major mara accas		
Program	Total *	R&D
Aircraft	\$ 6,067	\$ 641
Missiles	5,579	3,112
Ships	1,485	142
Tank-Automotive	745	22
Weapons	211	40
Ammunition	661	76
Electronics	2,918	648
	\$17,666	\$4,681
Services	\$ 1,800	\$ 409
All Other		
Subsistence	580	
Textiles, Clothing	262	1
Fuels and Lubs	788	1
Misc. Hard Goods	1,054	3 2
Construction	1,360	1
Less than \$10,000	2,710	18
Subtotal * Includes R&D	\$ 6,754	\$ 53
merades nab		

(Cont. on Page 2)

Navy Kicks Off Deep Submergence Program

That great unknown frontier—the deep ocean—will be probed by the Navy and Industry in a new Deep Submergence Systems Project.

The Navy's Special Projects Office, manager of the Polaris Fleet Ballistic Missile Program, has outlined a five-year \$200 million program for rescue, search and salvage from the deep ocean. The program represents a best estimate, at this time, as to what it will cost to meet the Chief of Naval Operations' requirements within the five-year period. The dollar amounts attributed to each requirement are not approved

funds. Technical development plans are being prepared which will allow a refinement of the cost estimates. A revised program change proposal will be submitted later concerning the five-year-program period.

The chain of events that led to the new project was triggered by the tragic loss of USS THRESHER. A special review group studied the Navy's deep ocean capabilities and found them inadequate. The study recommended a comprehensive five-year program to improve the situation.

Approval of such a program (Cont. on Page 4)

(Cont. from Page 1)

An interesting aspect of defense industry is its ever changing structure. As major advances occur in military technology or as the defense posture is revised some programs decline while others ascend in importance. This changing face of the market place is reflected in Table 2, which compares the mix of major hard goods contracts during periods in World War II, Korea and FY 1961.

TABLE 2
Comparison of DOD Contract Awards
in Three Eras.

	(percentage	es)		
Program	WWII `	percentage Korea	FY'61		
Aircraft	27.3	31.5	28.2		
Missiles	0.0	0.5	33.6		
Ships	26.2	6.8	7.8		
Electronics	6.6	11.2	18.0		
Tank-Automotive					
& Other	39.9	50.0	12.4		
	100.0	100.0	100.0		

Another aspect of defense industry—one with considerable economic ramifications—is the concentration of defense procurement dollars in a relatively small group of contractors. Some index of this concentration is given in Table 3, which analyzes the share of prime contract awards to the 100 companies which received the largest volume of defense contracts of \$10,000 or more for the last five fiscal years.

TABLE 3

Analysis of 100 Companies Receiving Largest Dollar Volume of DOD Awards in FY 1959-1963.

(percent of total contract \$'s)

Companies 1959 1960 1961 1968 1961 24.8 25.0 24.8 22.5 23.2 Top 5 54.6 53.5 54.8 50.8 51.9 Top 25 73.9 74.2 72.3 Top 100 73.8 73.4

A most important part of the defense industry is the small business community. Small business firms have two roles in the defense market place—that of prime contractor in its own

New Defense Security Office To Open In March

A Defense Industrial Security Clearance Office will open in March 1965 within the facilities of the Defense Construction Supply Center in Columbus, Ohio. The new office will provide for consolidation of industrial personnel clearance functions now performed at more than 100 locations throughout the country. It will operate under the direction of the Defense Supply Agency.

The new office will assume responsibility for security clearances of defense contractor employees who require access to classified information in connection with classified defense contracts. Clearances are now processed by the three Military Services. This consolidation in no way effects the responsibility for final adjudicative actions resulting in denial or revocation of clearances which remains with the Office of the Assistant Secretary of Defense (Manpower).

Establishment of this new office is part of the Department of Defense plan to consolidate under central management some 200 Military Department organizations which are engaged in contract administration services.

right and that of supplier or subcontractor to other prime contractors.

As a prime contractor, small business is obtaining in FY 1964 about 17% of DOD contract dollars. As Table 4 shows, it does well in subsistence, textiles and clothing, construction and in buys of less than \$10,000, but receives a relatively small share of the dollars spent on major hard goods.

The exact share of work subcontracted to small business is not known because of insufficient statistical data. But it is known that in the years from 1957 through 1963 it averaged \$3,653 million per year. This indicates that the overall share of small business in the defense market place, as represented by the sum of its prime and subcontract dollars, is approximately one third of the total.

From the foregoing we can draw four important conclusions about the defense market place:

(1) It is our main source for research, development and production of military hardware;

TABLE 4

DOD Prime Contract Awards to Small Business in FY 1964 (in millions).

	Small Business	
Program Major Hard Good	Total S	DOD Total
Aircraft	\$ 195	3.2%
Missile System	89	1.6
Ships	152	10.2
Tank-Automoti	ve 78	10.4
Weapons	58	27.3
Ammunition	100	15.2
Electronics	302	10.4
Subtotal	974	5.5
Services	412	22.9
All Other		
Subsistence	307	53.0
Textiles, Clothi	ng 176	67.1
Fuels and Lub	es 180	22.8
Misc. Hard Goo	ds 307	29.1
Construction	767	56.4
Less than \$10,0	00 1,395	51.5
Subtotal	3,132	46.4

(2) Because of its size and ever changing structure, its impact on the economy is significant; (3) The lion's share of the defense

(Cont. on Page 3)

New Procurement Forms Tested By DOD

The Department of Defense (DOD) recently initiated a sixmonth test of new and simplified procurement forms at a number of Defense activities and installations. During the test, which began on November 2, 1964, four new forms are being used interchangeably for negotiated and advertised procurements in excess of \$2,500 in lieu of 20 existing forms. The test is being supervised by the DOD Services Procurement Regulation (ASPR) Committee.

If the new forms prove successful in the test, they are expected to be used throughout the DOD, with substantial savings to both the Department and Industry. Other Federal Government procurement agencies have expressed interest in the test and, if the simplified forms prove successful in the DOD, they may be adopted Government-wide.

The forms to be tested are:

DD Form 1489 (Request for Quotation)

DD Form 1490 (Solicitation and Offer)

DD Form 1491 (Award/ Contract)

DD Form 1492 (Modification of Solicitation or Contract)

The activities and installations that are participating in this test of procurement forms are:

LOCATIONS

Department of the Army

Army Electronics Materiel Agency, Philadelphia, Pa.

Army Aviation and Surface Command, St. Louis, Mo.

Army Engineer District, Baltimore, Md.

Department of the Navy

Navy Purchasing Office, Washington, D.C.

Area Public Works, Chesapeake, Washington, D.C.

Department of the Air Force

Barksdale AFB, Shreveport, La.

Columbus AFB, Columbus, Miss.

Westover AFB, Chicopee Falls, Mass.

Whiteman AFB, Knob Noster, Mo.

Dyess AFB, Abilene, Texas Ellsworth AFB, Rapid City, S. Dakota

Vandenberg AFB, Lompoc, Calif.

Kelly AFB, San Antonio, Texas Wright-Patterson AFB, Dayton, Ohio

Travis AFB, Fairfield, Calif. McGuire AFB, Wrightstown, N. J.

Sheppard AFB, Wichita Falls, Texas

Amarillo AFB, Amarillo, Texas

Electronics System Division, L. G. Hanscom Field, Mass.

Kirkland AFB, Albuquerque, New Mexico

Air Proving Ground Center, Eglin AFB, Florida

Defense Supply Agency

Defense Industrial Supply Center, Philadelphia, Pa.

All other Department of Defense activities and installations will continue to use currently authorized ASPR procurement forms during the test period.

The Market Place

(Cont. from Page 2)

dollars is concentrated in relatively few contractors; and (4) Small business, although it obtains a lesser share of the defense dollars, is an essential part of it.

These four observations do not tell the whole story of the defense market place but they do throw some light on the why's and wherefore's of the procurement policies under which the Defense Department buys.

They underscore the need to keep a strong and healthy defense industry—one capable of outstripping the rest of the world technologically, of shifting its efforts to new fields as the needs of Defense require, and of providing defense mate-

rials at a price that we can afford. At the same time they draw attention to a very important prerequisite—that in order to keep the industry strong and healthy, DOD procurement policies must be concerned with maintaining conditions that promote our free enterprise system.

Our procurement policies aim to reverse the trend towards excessive concentration of dollars with large contractors, to increase the small business share and, in short, to provide for a strong, broad-based defense industry. To foster a healthy and dynamic industry our policies emphasize a highly competitive, multi-seller market place of real risks, where the rewards for efficiency and the penalties for inefficiency are clear-cut and certain.

DIPEC Expedites Contract Completion

Certain Air Force satellite programs now in the planning stages may reach completion more than a year ahead of schedule, and at less cost, due to re-use of idle assets of the Defense Industrial Plant Equipment Center (DIPEC), a field activity of the Defense Supply Agency.

The Center has supplied an Air Force contractor with equipment which, according to estimates, will result in completion of the contract as much as 17 months in advance of the previous schedule.

From its centralized inventory of idle defense-owned industrial plant equipment, DIPEC has provided an interferometer—an instrument that uses light interference phenomena for measurement of wave lengths—to a Rochester, N.Y., firm. This will be used in the manufacture of large diameter optical glass.

The interferometer supplied by DIPEC is one of only three ever manufactured in the United States. Acquisition cost of the item was \$85,181, which means that the Air Force would have been required to bear this or greater expense if the item had not been available from DIPEC's idle inventory.

The Defense Industrial Plant Equipment Center, located at the Defense Depot in Memphis, Tenn., was established in March 1963. The Center manages defense-owned idle industrial plant equipment—equipment used in manufacturing—and maintains the weapons of America's defense arsenal. Specifically, DIPEC is responsible for:

• Screening Department of Defense requirements against idle industrial plant equipment to insure reutilization of available assets.

- Composition, maintenance and control of a balanced reserve.
 - Providing centralized inven-(Cont. on Page 21)

Deep Submergence

(Cont. from Page 1)

came quickly, and \$3.5 million was re-programmed into FY 1965 to begin work immediately.

Deep Sub is primarily an ocean engineering project. It meets specific Navy operational requirements, but it may also provide an industrial base for work of all sorts in the deep ocean.

The project aims are these:

- 1. Search vehicles—four of them—that would probe as deep as 20,000 feet. These would locate and recover objects of less than 10 tons. In addition to the four operational vehicles, there will be a shallow-depth test vehicle and one prototype capable of 6,000 foot operation. Some \$93 million is programmed for this area, which includes considerable supporting research and development.
- 2. Rescue vehicle to lift men from disabled submarines. These small vehicles would carry a dozen men to safety on a mother submarine or on a surface ship. Six are to be built. All would be air transportable. About \$42 million is planned for this phase.
- 3. A salvage system, probably using collapsible pontoons, to lift submarines with a dead weight of up to 1,000 tons from continental shelf depths (600-800 feet). About \$21 million is to be spent here, with another \$11.5 million for studies into the feasibility of making the system

lift submarines from the deeper ocean.

4. Free divers doing useful work for extended periods on the continental shelf. Divers would actually live in a "sea hut" for up to 90 days and work six hours a day in the ocean outside the hut. They are now restricted to 30 minutes work at a maximum of 380 feet. Ten million dollars would be spent here. with another \$4 million in studies for putting divers even deeper. This man-in-the-sea portion of the project will also develop better methods of individual escape from disabled submarines.

Current planning calls for funding some \$30 million in FY 1965, \$55 million in 1967, \$40 million in 1968, \$35 million in 1969, and \$25 million in 1970.

Requests for proposals for various sub-systems are scheduled for issue to industry by spring and early summer 1965. Special Projects will act as its own systems contractor, as in the Polaris project.

The Navy briefed representatives of some 200 companies with established interests in Deep Sub areas in Washington, D. C., last November.

In remarks to that group, Rear Admiral I. J. Galantin, the Director of the Special Projects Office, recalled the partnership with industry which was adopted for the Polaris program eight years ago. He predicted a similar close harmony between Industry and the Navy in the new project.

Transcripts of the all-day briefing, which included summaries of each phase of the Deep Sub project, are available from the National Security Industrial Association, 1030 Fifteenth Street, N. W., Washington, D. C.

Improvements In Contracting Explained By AF's Gen. Gerrity

Lieutenant General Thomas P. Gerrity, U.S. Air Force, Deputy Chief of Staff, Systems and Logistics, has strong ideas on how the changing procurement climate will affect Air Force objectives in the procurement of materiel.

General Gerrity recognizes that the Air Force-Industry team has made great strides in recent years in the development and acquisition of newer high performance weapon systems and support systems.

However, he warns that we cannot rest on our laurels, particularly when we look at the problems of today and tomorrow and the accompanying challenges not only to maintain an effective and ready force now—but to modernize that force so that it can be effective in the future.

In the following paragraphs General Gerrity explains the changing Air Force procurement policies:

"Our operating and support costs have been subject to the normal upward trends caused by increased costs of manpower, both in Government and in Industry. Further, development and production costs of newer high performance systems have reduced the variety of systems that we can develop and procure.

"Recognizing this, the Air Force has had a very aggressive program for a number of operating and support costs. Much has been done to reduce these costs by development of new management techniques, particularly in the field of maintenance and supply. As a result

today we are maintaining combat and support systems worth 56% more than in 1958 at a cost in spare parts annual procurement substantially less than 50% of the 1958 rate.

"As to the annual budget for development and acquisition of equipment to modernize our force, we have made great strides in improving our efficiency in this task. However, further progress is possible if we take full advantage of the greatly increased competitive environment which exists in industry today. To do this, both the Air Force and Industry must take the pains and time in the pre-contracting phase to fully define what is wanted in terms of performance, reliability, delivery schedules and the terms and conditions (including incentive rewards and penalties) which will insure that we get what we want at prices quoted competitively. This should encourage substantially lower costs in acquiring higher performance systems.

"Certain subjects merit emphasis in our development and acquisition effort. The first is reliability. Unless we achieve a much higher plateau of reliability in our new weapon systems, we will suffer a degradation in mission reliability which we can ill afford. With the fewer systems we are able to procure today, the demand is for much higher operational in-commission performance reliability.

"We cannot afford systems which do not have high reliability designed into them. But neither can we afford high main-

tenance costs, high spares costs, high overhaul costs and high modification costs which impact our operating and support budgets. The complexity of our newer-higher performance systems is not a liability if high reliability is achieved, but can impose an insurmountable problem if our standards are not met. Hence, we are stating reliability requirements in terms of specific standards.

"We intend to further expand the use of correction of deficiency clauses in our contracts. These clauses will provide a greater incentive to meet not only the letter but the intent of the current specifications with respect to performance and reliability.

"By increasing the use of multi-year procurement, we will see substantial rewards both to Industry and the Air Force. The Air Force will obtain greater standardization which will reduce operating, support, and training costs. We will also reduce costs through competition and continuity of production from year to year. From an industry point of view, there

(Cont. on Page 6)

Shillelagh System Under New Management

Management of the Army's Shillelagh weapon system has been transferred from the U. S. Army Weapons Command, Rock Island, Ill., to the Missile Command at Redstone Arsenal, Ala.

The recent move separates management of the missile system from the Sheridan/Shillelagh project to permit the potential application of the Shillelagh missile to other uses.

Coincidental with the move, Lieutenant Colonel R. M. Pearce was named project manager. (Cont. from Page 5)

will be greater interest in bidding on larger quantities. There also will be less tendency on the part of some companies to buy in on an initial one-year contract hoping for the rewards of subsequent sole source contracts. Further, there should be greater rewards to industry through ability to achieve more efficiency in longer term production runs.

"We are also experimenting with the approach of buying a complete development and production follow-on in one contract. This poses many difficult problems in defining clearly what we want and it may not be achievable on R&D programs involving substantial advancements. But here again our objective is to place the maximum amount of our procurement under the competitive process and to minimize a sole source follow-on.

"On the matter of standardization, many of our follow-on procurements of equipments already in our inventory are made annually on a competitive basis. Often the original designer is not the low bidder. As a result, we have items in our inventory meeting the same requisites of form, fit and function, but possessing no similarity in the detail parts which make up these products. Therefore, we must maintain many more spare parts items in our inventory than we would need if we were able to standardize.

"We have a program underway now to evaluate what we term the real costs of supporting such new items in the inventory. Real cost considers the additional logistic support which new items require, in addition to the bid costs for procuring

these items. We will continue to emphasize real cost in our evaluation of procurements of similar items.

"We also intend to further the use of incentives in future contracts. Proper incentives in our contracts combined with adequate correction of deficiency clauses will provide increased confidence towards our getting the quality products we need.

"There is no question but that the procurement environment in which we live today is different than that of yesterday and the environment of tomorrow will undoubtedly differ from today's. We must change our methods as demanded by the challenge of the time and the environment. We will not only change our basic policies and procedures as sound analysis proves they should be changed but we are also willing to experiment where new ideas offer attractive gains but remain to be proven. We need the combined ideas of the many intelligent and experienced procurement people in the Air Force and Industry to bring new ideas into focus and to conduct such experimentation where warranted.

"In conclusion, the Air Force/ Industry team has made substantial progress in the recent past in improving our efficiency and effectiveness in the development and acquisition processes. It will take that same team effort to find solutions for the challenges of today and tomorrow. The team that enabled the dramatic progress to the jet age, the supersonic age, the ballistic missile age and to the space age in a relatively few years certainly has the brain-power, the ingenuity, and the motivation to meet the challenges of the future."

TECHNICIANS AVAILABLE TO INDUSTRY

The Department of Defense has assured all career employees affected by base closures that they will receive other job opportunities. Hiring of new employees in the Defense Department has been restricted and displaced career employees are being given the opportunity to fill vacancies in the Department as such vacancies develop.

Many of the displaced employees, however, because of location preferences or other reasons. will be interested in employment in industry. Defense contractors and other industrial concerns seeking competent personnel are urged to recruit at the bases being closed. Arrangements to advise employees of positions for which companies are recruiting or for company recruiters to visit the defense installation being closed can be made directly with the Civilian Personnel Officer located at such bases.

Of particular interest to industrial organizations in need of experienced personnel are the large industrial-type organizations being discontinued such as shipyards (New York, N. Y. and Portsmouth, N. H.), arsenals (Watertown, Mass., Springfield, Mass., and the Elwood Unit of the Joliet Arsenal, Joliet, Ill.); Air Materiel Areas (Griffiss AFB, Rome, N. Y.; Brookley AFB, Mobile, Ala.; and Norton AFB, San Bernardino, Calif.) Companies are urged to include these installations, and other bases being discontinued, in their recruitment programs. (See excerpt from Asst. Secretary of Defense Paul's speech on page 13.)



ABOUT PEOPLE

DEPARTMENT OF DEFENSE

Paul R. Ignatius was sworn in as Asst. Secretary of Defense (Installations & Logistics) on Dec. 23, 1964. Prior to assuming his new position, Mr. Ignatius served as Asst. Secretary of the Army (Installations & Logistics), an appointment which he received in May 1961, and then became Under Secretary of the Army in February 1964. He succeeds Mr. Thomas D. Morris, who resigned to return to private industry.

The following personnel assignments were recently made in the Office of the Dir. of Defense Research & Engineering: Mr. Richard D. Geckler as Asst. Dir. of Research & Engineering (Strategic Weapons); Dr. S. Rains Wallace as Chief, Behavioral & Social Sciences; and Brig. Gen. Cuyler L. Clark, USA, as Military Assistant to the Dep. Dir. (Technical Warfare Programs).

New appointments made in the Advanced Research Projects Agency: Dr. Harold H. Hall as Chief Scientist, Office, Dir. for Remote Area Conflict (Project AGILE), a newly created position; Dr. Peter L. Auer as Dep. Dir., Office, Dir. for Ballistic Missile Defense (Project DEFENDER); and Dr. Lee W. Huff as Dir. of Behavioral Sciences (Project CARINA).

Maj. Gen. Rush B. Lincoln, Jr., USA, was designated Commander of the new Military Traffic Management & Terminal Service.

The Defense Atomic Support Agency (DASA) has announced the appointment of Dr. Theodore B. Taylor as Dep. Dir. (Scientific). In this position, Dr. Taylor will be top assistant to the DASA Director and will have prime responsibility in the field of nuclear weapon effects research and tests, including planning and management.

ARMY

Brig. Gen. Lawrence P. Jacobs has been appointed Dep. Chief of Communications-Electronics. Col. Donald R. Bodine, who had served as Dep. Chief of Communications-Electronics, is now Chief, Plans, Policies and Programs Office, in the Office, Chief of Communications-Electronics.

Col. Francis C. Fitzpatrick has assumed command of the U. S. Army Foreign Sciences & Technology Center, Washington, D.C. Col. Gilbert M. Payne, who previously served as commander, is deputy commander.

The following personnel assignments were recently made in the Office, Chief of Research & Development (OCRD): Brig. Gen. Kenneth H. Bayer as Dep. Dir. of Research & Development (Operations); Brig. Gen. Tobias R. Philbin, Jr., as Dep. Dir. of Research & Development (Plans); Col. George Sammet, Jr., as Dep. Dir. of Special Weapons; and Col. Paul Gray, Jr., as Chief, Air Defense Div.

Dr. Gordon Lake Bushey has been named Asst. Chief Scientist for the Army Materiel Command; Dr. Lawrence E. Killion has been designated Scientific Advisor and Director of the Test & Evaluation Department, U. S. Army Electronic Proving Ground, Ft. Huachuca, Ariz.

The new commander of the U. S. Army Tropic Test Center at Ft. Clayton, Canal Zone, Panama, is Col. Pedro R. FlorCruz.

Lt. Col. R. J. Astor now heads the Future Missile Systems Div., U. S. Army Missile Command at Redstone Arsenal, Ala.

NAVY

RAdm. Fred E. Bakutis has been reassigned from Commander, Antisubmarine Group 1, to Commander, Naval Support Force Antarctica. His replacement is Capt. Evan P. Aurand (RAdm. selectee), formerly of the Navy Program Planning Office, Office, Chief of Naval Operations.

RAdm. James R. Reedy, formerly Commander, Naval Support Force Antarctica, has been designated Commander, Carrier Div. 2.

RAdm. Samuel R. Brown has been reassigned to the Office, Chief of Naval Operations from his previous position as Commander, Carrier Div. 4. His replacement is RAdm. Allan F. Fleming, formerly Dep. Chief of Staff for Plans to the U. S. National Representative, Allied Forces, Mediterranean.

The new Asst. Chief of Staff, Logistics for the Commander in Chief, Allied Forces Southern Europe, is Capt. Phillip A. Beshany (RAdm selectee), formerly Commander, Submarine Squadron 16. He replaces RAdm. Donald W. Wuelzen, who has been reassigned as Commander, Amphibious Group 1.

RAdm. Harry N. Wallin has been named Dir., Office of Management Information, Department of the Navy. He was formerly Dep. Chief of Naval Material (Management & Organization).

The following assignments were recently made in the Bureau of Naval Weapons: Capt. H. N. Batten, Program Manager for Carriers, Amphibians, and Auxiliaries; Capt. V. P. O'Rourke, Fighter Design Officer; Capt. A. K. Earnest, Attack Design Officer: Capt N. D. Champlin, Project Manager for AIMS and Co-Director for Department of Defense AIMS Project Systems; Cdr. H. T. Cooper, Project Manager for A-4; Cdr. E. B. Boutwell, Asst. Dir., Strike Warfare, for Guided Missiles, and Project Manager for BULLPUP; Cdr. J. L. Coleman, Project Manager for COIN.

New assignments in activities of the Bureau of Supplies & Accounts: Capt. F. W. Corle, SC, Commanding Officer, Electronics Supply Office, Great Lakes, Ill.; Capt. O. W. Stafford, SC, Officer in Charge, Navy Purchasing Office, Washington, D. C.; Capt. W. W. Lenox, SC, Dir., Procurement Services Div., Office of Naval Research; and LCdr. D. E. Lovell, SC, Asst. Officer in Charge, Navy Purchasing Office, New York, N. Y.

AIR FORCE

The Air Force has announced 1965 retirement dates of a number of general officers based on lengths of service ranging from 30 to 35 years.

Gen. Mark E. Bradley, Jr., Commander, Air Force Logistics Command, and Gen. Walter C. Sweeney, Jr., Commander, Tactical Air Command, are both scheduled to retire July 31.

Another four-star general on the retirement list is Gen. John K. Gerhart, Commander-in-Chief, North American Air Defense Command, whose retirement date is March 31. Maj. Gen. E. B. Cassady, Commander, Mobile Air Material Area, Brookley AFB, Ala., will retire Jan. 31.

Other general officers to retire are: Maj. Gen. Lee W. Fulton, Dir., Procurement & Production, AFLC, Wright-Patterson AFB, Ohio, April 30; Maj. Gen. Donald L. Hardy, Commander, Defense Industrial Supply Center, DSA, Philadelphia, Pa., May 31.

Maj. Gen. Arthur C. Agan, Jr. was assigned as Asst. Deputy Chief of Staff, Plans & Operations, HQ USAF, effective Dec. 1.

Other USAF general officer assignments have been announced as follows: Brig. Gen. Robert F. Worley as Asst. Deputy for Operations for Command & Control, Hq Tactical Air Command, Langley AFB, Va., effective Dec. 21; Brig. Gen. Charles G. Chandler, Jr. as Dir. of Maintenance Engineering, Office, DCS/Systems & Logistics, Hq USAF, effective Jan. 4; Brig. Gen. Harry L. Evans as Dep. Commander for Space for Manned Orbiting Laboratory, AFSC, effective Feb. 1; Brig. Gen. David M. Jones as Dep. Associate Administrator for Manned Space Flight, NASA, effective Dec. 14: Maj. Gen. Samuel C. Phillips as Dir. Apollo Program, NASA, effective Dec. 15.

The following USAF colonel assignments have been announced: Col. James W. Lillard, Jr. as Asst. Deputy for Weapons Effectiveness Testing, Air Proving Ground Center, AFSC, Eglin AFB, Fla.; Col. Thomas W. Morgan as Asst. Deputy Director for Program Management, Apollo Program Office, NASA; Col. Worth C. Clarke as Chief,

Command & Control Div., Mobile Air Materiel Area, AFLC, Brookley AFB, Ala.; and Col. Leonard J. Otten, Jr. as Dir. of Special Weapons, San Antonio Air Materiel Area, AFLC, Kelly AFB, Tex.

Col. Fred L. Rennels, Jr. has assumed command of the Air Force's Western Contract Management Region effective Dec. 7, 1964. He succeeds Col. Robert W. LaPlante who will continue to serve as Vice Commander, WCMR.

USAEL ANNOUNCES REPORT ON FUEL CELLS

Fuel cell research reports from all known sources of activity have been collected by the U. S. Army Electronics Laboratories, Fort Monmouth, N. J., for incorporation in a forthcoming Fifth Status Report on Fuel Cells.

Initiated by the U. S. Army Research Office in 1959, the annual status reports on fuel cells have been prepared by the Electronics Laboratories for the past three years, following primary assignment for the Army fuel cells program to the Laboratories. The report includes industrial, university and non-profit research organization as well as Government agency activities.

The Fifth Status Report on Fuel Cells will not contain any classified or proprietary information and, like the four previous volumes, will be made available to the public through sale by the U. S. Department of Commerce, Office of Technical Services, Washington, D. C.



February 1965

National Air Navigation Meeting on FUTURE NAVIGATION ASPECTS OF LIMITED WAR (program is classified CONFIDENTIAL), Feb. 18–19, at State Department Auditorium, 23rd and C Streets, NW, Washington, D. C. Sponsor is The Institute of Navigation. For additional information, contact Mr. Ralph V. O'Brien, Institute of Navigation, 711 14th Street, NW, Washington, D. C. 20005.

March 1965

The U.S. Navy is co-sponsoring with the American Institute of Aeronautics and Astronautics a three-day conference on U.S. NAVY-MARINE SYSTEMS AND ANTI-SUBMARINE WARFARE, 8–10 March 1965, in San Diego, California. The Navy will present an Advanced Planning Briefing to Industry during the morning of the first day, 8 March. This briefing will be followed by technical sessions.

April 1965

International Conference on PROGRAMMING AND CONTROL, mid-April, at U.S. Air Force Academy, Colo. Co-sponsors: Air Force Office of Scientific Research, The Frank J. Seiler Research Laboratory and the University of California, Berkeley, Calif. For information contact: Maj. Orlando J. Manci, Frank J. Seiler Research Laboratory, USAF Academy, Colo., telephone 474–3120.

MEETINGS AND SYMPOSIA

International Conference on the MECHANICS AND PHYSICS OF SOLID PROPELLANTS, April 19–21 at Purdue University, Lafayette, Ind. Sponsor: Office of Naval Research. For information contact: Mr. J. M. Crowley, telephone OXford 6–5350, or Dr. H. Liebowitz, telephone OXford 6–2283, both at the Office of Naval Research, U.S. Department of the Navy, Washington, D.C.

Nineteenth Annual FRE-QUENCY CONTROL Symposium April 20–22, at the Shelburne Hotel, Atlantic City, N.J. Sponsor: U.S. Army Electronics Laboratories. For information contact: Mr. Millard F. Timm, Solid State and Frequency Control Division, U.S. Army Electronics Laboratories, Fort Monmouth, N.J. Telephone extension 51728.

Polytechnic Institute of Brooklyn International Symposium on SYSTEM THEORY, April 20-22 in New York, N.Y. Sponsors: The Microwave Research Institute of the Polytechnic Institute of Brooklyn, Air Force Office of Scientific Research, Office of Naval Research, the Army Research Office in cooperation with the Institute of Electrical and Electronics Engineers and the Society for Industrial and Applied Mathematics. For information contact: Symposium Committee, Polytechnic Institute of Brooklyn, 333 Jay Street, Brooklyn, N.Y. 11201.

May 1965

Symposium on NUMERICAL SOLUTION OF PARTIAL DIFFERENTIAL EQUATIONS, May 3-7, at the University of Maryland, College Park, Md. Sponsors: Air Force Office of Scientific Research, Office of Naval Research and the University of Maryland. For information contact: Maj. B. R. Agins (SRMA), Air Force Office of Scientific Research, Tempo-D, 4th Street and Independence Ave., S.W., Washington, D.C. 20333, telephone OXford 6-1302.

Conference on ULTRAPURI-FICATION OF SOLID-STATE ELECTRONICS MATERIALS, May 8–10, at New York, N.Y. Sponsors: Air Force Cambridge Research Laboratories and the New York Academy of Sciences. For information contact: Drs. A. F. Armington or M. S. Brooks (CRW), Air Force Cambridge Research Laboratories, L. G. Hanscom Field, Bedford, Mass. 01731, telephone Area Code 617, CRestview 4–6100, ext. 4086.

The Third ORGANIC CRYSTAL Symposium, May 10–12, at University of Chicago, Center for Continuing Education, 1307 E. 60th St., Chicago, Ill. Sponsors: University of Chicago, Office of Naval Research and the Department of the Army. For information contact: Maj. Lawrence P. Jonahan, Jr., U.S. Army Research Office-Durham, Box CM, Duke Station, Durham, N.C., telephone 286–2285.

DOD REPORTS REDUCTION IN ASPR IMPLEMENTATION

Consolidation in the Armed Services Procurement Regulation (ASPR) of a number of existing procurement instructions was announced recently by the Defense Supply Agency. This action is designed to (1) eliminate much of the confusion being experienced by contractors in attempting to comply with various overlapping instructions; (2) assist in standardizing contract administration: (3) speed up the training and effectiveness of new government personnel: and (4) result in savings to both the contractor and the Government.

This progress is the result of a program initiated by the Department of Defense in October 1963 to consolidate into the ASPR the separate procurement instructions of the Military Departments and the Defense Supply Agency. In the future, departmental publications generally will be limited to internal management instructions.

Consolidation of separate departmental instructions into the ASPR on the following topics has been completed to date with the publication of revisions as indicated: ASPR Revision 4, March 6, 1964: (1) Letter Contract Clauses and (2) Clauses for Time and Material and Labor Hour Contracts; ASPR Revision 6, July 1, 1964: (1) Renegotiation Performance Reports and (2) Leader Company Procurement: ASPR Revision 7, September 1, 1964: (1) Post-Award Orientation of Contractors, (2) Warranties, (3) Patents-Authorization and Consent, Indemnification; and additional coverage in ASPR Section I, Part 15 on Options; ASPR Revision 8, November 1, 1964: (1)

Terminations—Impact on Contractor Personnel and (2) additional coverage on Procurement of Research and Development; and Defense Procurement Circular No. 9, June 18, 1964: Responsibility of Contractors in Defense Procurement.

The consolidation of separate departmental instructions into the ASPR is a continuing project and the part that pertains to standard contract administration rules and procedures is directly related to the progress

made in completing the consolidation of defense contract administration services under central management of the Defense Supply Agency.

The ASPR Committee has two panels to assist in this project. One panel is responsible for developing uniform contract administration policies and procedures and the other for developing additional ASPR coverage based on useful existing departmental instructions.

ADVANCE PLANNING BRIEFINGS AGENDA IS SET BY DOD-NSIA

The first five in a series of unclassified Advanced Planning Briefings for Industry will be conducted by the Department of Defense (DOD) in March and April of 1965 at the following locations:

Mar 3-4—Ambassador
Hotel, Los Angeles
Mar 16-17—Americana
Hotel, New York City
Mar 31-Apr 1—Conrad
Hilton Hotel, Chicago
Apr 14-15—Marriott Motor
Hotel, Dallas

Apr 28–29—Sheraton Park Hotel, Washington, D.C.

The objective of the briefings, which are sponsored by the National Security Industrial Association (NSIA), is to provide business and labor with a DOD-wide picture of long-range development needs, and to assist industry in planning for and seeking defense contracts.

"Within the limits of security," according to Deputy Secretary of Defense Cyrus R. Vance, "discussions will be as specific as possible in order to provide industry and the public with an understanding both of the de-

fense advance planning process and our future plans which will affect industry's role in research, development, production and the provision of goods and services."

The Director of the Department of Defense Small Business and Economic Utilization Office and representatives of the Military Departments and Defense Supply Agency will be present at the briefings to provide counseling services on contract policies and procedures of their organizations. These representatives will be prepared to stay on an additional day following the briefings if there is sufficient interest on the part of the scientific and industrial community present to warrant.

Planning and invitations are being handled by the NSIA Washington headquarters, its city chapters and sponsoring industries.

As indicated in the master program on page 12, senior military and civilian officials of the Defense Department as well as leaders in industry and labor will participate in the briefings.

SPEAKERS CALENDAR

OFFICE OF THE SECRETARY OF DEFENSE

GEN. E. G. WHEELER, Chairman, Joint Chiefs of Staff, at Printing Week Banquet, Philadelphia, Pa., Jan. 22.

HON. JOHN T. McNAUGH-TON, Asst. Secretary of Defense (International Security Affairs), at Brookings Institution, Washington, D.C., Jan. 28; at Canadian Defense College, Washington, D.C., Feb. 11.

HON. PAUL R. IGNATIUS, Asst. Secretary of Defense (Installations & Logistics), at Industrial College of the Armed Forces, Washington, D.C., Feb. 5.

HON. EUGENE G. FUBINI, Asst. Secretary of Defense (Dep. Dir. of Defense Research & Engineering), to Panel, Institute Electrical & Electronic Engineers, Los Angeles, Calif., Feb. 5.

HON. NORMAN S. PAUL, Asst. Secretary of Defense (Manpower), at Armed Forces Radio & Television Luncheon, Washington, D. C., Feb. 10.

DEPARTMENT OF THE ARMY

LT. GEN. WILLIAM W. DICK, JR., Chief of Research & Development, Office, Chief of Staff, U. S. Army, at 17th Annual Naval Reserve Research Seminar, Washington, D.C., Feb. 5.

LT. GEN. L. J. LINCOLN, Dep. Chief of Staff for Logistics, Office, Chief of Staff, U. S. Army, at Annual USMA Founders Day Celebration, Michigan West Point Society, Detroit, Mich., March 16.

DEPARTMENT OF THE NAVY

RAdm R. L. MOORE, JR., Chief, Office of Industrial Relations, Navy, at Industrial College of the Armed Forces, Washington, D. C., Feb. 3.

VAdm W. A. SCHOECH, Chief of Naval Material, at Industrial College of the Armed Forces, Washington, D. C., Feb. 9 and 16.

VAdm. G. R. DONAHO, Commander, Military Sea Transport Service, at Tulane University, New Orleans, La., March 15; at Air War College, Maxwell AFB, Ala., March 25.

DEPARTMENT OF THE AIR FORCE

HON. E. M. ZUCKERT and GEN. C. E. LeMAY at Air Force Association Dinner, Omaha, Neb., Jan. 25. (Appearance only.)

GEN. B. A. SCHRIEVER, Commander, Air Force Systems Command, at MacArthur Dedication, Norfolk, Va., Jan. 26; at Chamber of Commerce Meeting, El Segundo, Calif., Feb. 3; at American Institute of Aeronautics & Astronautics and Air Force Association Meeting, San Bernardino, Calif., Feb. 4; at Air Force Association Squadron Meeting, Milwaukee, Wis., Feb. 10.

BRIG. GEN. H. J. SANDS, JR., Commander, Ballistic Systems Div., AFSC, at American Society for Quality Control Meeting, Los Angeles, Calif., Jan. 26.

MAJ. GEN. R. H. CURTIN, Dir. of Civil Engineering, Hq. USAF, at Society of American Military Engineers Meeting, Cincinnati, Ohio, March 2.

MAJ. GEN. D. R. OSTRAN-DER, Commander, Office of Aerospace Research, USAF, at American Astronautics Society Meeting, Denver, Colo., Feb. 8.

MAJ. GEN. R. J. FRIED-MAN, Asst. Dep. Chief of Staff, Programs & Requirements, at Armed Forces Management Association Meeting, Washington, D. C., Feb. 9.

HON. E. M. ZUCKERT, Secretary of the Air Force, at Air Force Ball, New York, N. Y., Feb. 22. (Appearance only.)

GEN. J. P. MCCONNELL, Vice Chief of Staff, USAF, at American Ordnance Association Meeting, Los Angeles, Calif., Feb. 25.

HON. LEONARD MARKS, JR., Asst. Secretary of the Air Force (Financial Management), at Armed Forces Management Association Meeting, Dayton, Ohio, Feb. 25.

MAJ. GEN. O. J. RITLAND, Dep. Commander for Manned Space Flight, Air Force Systems Command, at American Institute of Aeronautics & Astronautics Meeting, Los Angeles, Calif., March 1.

PDP INDOCTRINATION FILM

DOD has a 33-minute film on Project Definition Phase with introduction by Dr. Harold Brown. It is available on loan from Asst. for Public Information, Naval Weapons Plant, Washington, D. C.

AGENDA DOD-NSIA ADVANCED PLANNING BRIEFINGS

Industry Keynote Address: What Industry Needs to Know

Speakers:

Thomas V. Jones, President, Northrop Corp., at Los Angeles, March 3. William E. Zisch, President, Aerojet-General Corp., at New York, March 16.

R S. Stevenson, President, Allis-Chalmers Mfg. Co., at Chicago, March 31.

March 31.

P. E. Haggerty, President, Texas Instruments, Inc., at Dallas, April 14.

Thomas Meloy, Melpar, Inc., at Washington, April 28.

DOD Keynote Address: Major objectives of the DOD and the programs designed to implement them. The changing patterns in Defense spending and the resulting problems and opportunities. Speakers:

Speakers:
Hon. Harold Brown, Dir., DDR&E, at New York, March 16; at Washington, April 28.
Hon. Paul R. Ignatius, Asst. Sec. of Defense (I&L), at Los Angeles, March 3; at Chicago, March 31.
Hon. Charles J. Hitch, Asst. Sec. of Defense (Comptroller), at Dallas, April 14.
Five Year Force Structure & Financial Program: Defense annual plansing the Agriculture was the assential elements of industry.

ning cycle; the decision process; the essential elements of industry planning.

Dr. Alain C. Enthoven, Dep. Asst. Sec. for Programming (Comptroller), at Los Angeles, March 3; at Dallas, April 14.
Dr. Alain C. Enthoven, Dep. Asst. Sec. for Systems Analysis (Comptroller), at New York, March 16; at Chicago, March 31; at Washington, April 28.

The Technological Challenge of the Next Ten Years: Future opportunities for industry in all areas of defense research and development. Speakers:

Dr. Albert C. Hall, Dep. Dir. for Space (Defense Research & Engineering), at Los Angeles, March 3.

Lt. Gen. William J. Ely, USA, Dep. Dir. for Administration & Management (Defense Research & Engineering), at New York, March 16.

March 16.
Dr. Chalmers W. Sherwin, Dep. Dir. for Research & Technology (Defense Research & Engineering), at Chicago, March 31.
Dr. Thomas P. Cheatham, Jr., Dep. Dir. for Tactical Warfare Programs (Defense Research & Engineering), at Dallas, April 14.
Mr. Fred A. Payne, Jr., Dep. Dir. for Strategic & Defensive Systems (Defense Research & Engineering), at Washington, April 28.

Luncheon Speakers:

Dr. Ruben Mettler, President, Space Technology Labs, Inc., at Los Angeles, March 3.

Dr. Emanuel R. Piore, Vice Pres. for Research & Engineering, IBM Corp., at New York, March 16.
Mr. C. H. Kellstadt, Dir., Sears Roebuck & Co., and Chairman, Board of Trustees, Logistics Management Institute, at Chicago,

March 31. r. C. B. Thornton, Chairman of the Board, Litton Industries, Inc., at Dallas, April 14.

Management Trends in Defense Development & Production: Current and planned management programs to achieve more effective control of weapons acquisition and support, such as use of government facilities, program management, project definition phase, PERT, and configuration and change control; small business; DIAC activities, contractor performance evaluation, cconomic adjustment and contracting trends. Speaker:

Mr. James W. Roach, Asst. Dir. Engineering Management (Defense Research & Engineering), at all five cities.

The Defense Cost Reduction Program: The success and effect of the cost reduction program and business, industrie continuing defense cost reduction effort. industry and labor's role in Speaker:

r. Paul H. Riley, Dep. Asst. Secretary for Supply & Services (I&L), at all five cities. Mr Paul H

Defense Supply Agency—Procurement Trends and Future Industry Relationships: The functions of the Defense Supply Agency, its purchasing and contracting objectives and the markets it offers for business and industry. Speaker:

VAdm Joseph M. Lyle (SC) USN, Dir., Defense Supply Agency, at all five cities.

Panel Discussion (DOD & Industry Moderators):

DOD Participants:

Hon. Paul R. Ignatius, Dr. Harold Asher, Dr. Albert C. Hall, and VAdm Joseph M. Lyle (SC) USN, at Los Angeles, March 3. Hon. Harold Brown, Dr. Alain C. Enthoven, Mr. Paul H. Riley, and VAdm Joseph M. Lyle (SC) USN, at New York, March 16. Hon. Paul R. Ignatius, Dr. Alain C. Enthoven, Dr. Chalmers W. Sherwin, and VAdm Joseph M. Lyle (SC) USN, at Chicago, March 31.

Hon. Charles J. Hitch, Mr. Paul Riley, Dr. Thomas P. Cheatham, Jr., and VAdm Joseph M. Lyle (SC) USN, at Dallas, April 14. Dr. Harold Brown, Dr. Alain C. Enthoven, Mr. Paul H. Riley, and VAdm Joseph M. Lyle (SC) USN, at Washington, April 28.

Closing Remarks:

G. J. Lynch, Chairman & President, Menasco Mfg. Co., at Los

G. J. Lynch, Chairman & President, Menasco Mfg. Co., at Los Angeles, March 3.
Robert O. Fickes, President, Philco Corp., at New York, March 16.
Frank Leach, Vice President & Group Executive, Amphenol-Borg Corp., at Chicago, March 31.
Clyde Skeen, President, Ling-Temco-Vought, Inc., at Dallas, April 14.
Donald T. Spaulding, President, IBM Federal Systems Div., at Washington, April 28.

Army Advanced Planning Requirements: Army's materiel and research and development requirements in the areas of missiles, other weapons, electronics, transportation, ammunition, repair parts and maintenance; the opportunities of businesses, small, medium and large. Speakers (at all five cities):

Hon. Daniel M. Luevano, Asst. Sec. of the Army (I&L)

Gen. Frank S. Besson, Jr., Commanding General, Army Materiel

Gen. Frank Command Maj. Gen. John G. Zierdt, Commanding General, U. S. Army Missile

Command

Maj. Gen. William W. Lapsley, Commanding General, U. S. Army Mobility Command Maj. Gen. Frank W. Moorman, Commanding General, U. S. Army Electronics Command

Brig. Gen. Roland B. Anderson, Commanding General, U. S. Army

Brig. Gen. Roland B. Anderson, Commanding General, U. S. Army Weapons Command

Navy Advanced Planning Requirements: A forecast of material requirements for ships and weaponry and opportunities of business to provide the hardware and research and development.

Speakers (at all five cities):

Hon. Kenneth E. BeLieu, Asst. Sec. of the Navy (I&L)

VAdm W. A. Schoech, USN, Chief of Naval Material

RAdm E. E. Christensen, USN, Asst. Chief of Bureau for Plans and Programs, Bureau of Naval Weapons

RAdm J. A. Brown, USN, Asst. Chief of Bureau for Design, Shipbuilding, and Fleet Maintenance, Bureau of Ships

Lunckeon.

Luncheon Speakers:

C. J. Haggerty, President, Building & Construction Trades Dept., AFL-CIO, at Los Angeles, March 4. Leonard Woodcock, Vice President, United Automobile, Aerospace & Agricultural Implement Workers of America, at New York,

March 17.

Joseph A. Beirne, President, Communications Workers of America, AFL-CIO, at Chicago, April 1.

A. J. Hayes, President, International Association of Machinists & Aerospace Workers, AFL-CIO, at Dallas, April 15.

Wm. F. Schnitzler, Secretary-Treasurer, AFL-CIO, at Washington, April 29.

ir Force Advanced Planning Requirements: The president and future requirements of the Air Force, with specific emphasis on short and long range logistical reuqirements; research and developmental forecasts in the field of missiles, space vehicles, aircraft, ground equipment and avionics; the Air Force Systems and Logistics Commands, their procurement program and the opportunities for business and industry.

Housely.

Speakers (at all five cities):

Hon. Robert H. Charles, Asst. Sec. of the Air Force (I&L)

Lt. Gen. W. A. Davis, USAF, Vice Commander, Air Force Systems Command Maj. Gen. M. C. Demler, USAF, Commander, Research & Technology

Div., Air Force Systems Commander, Research & Technology Div., Air Force Systems Command Maj. Gen. G. F. Keeling, USAF, Dir. for Procurement, Air Force Systems Command Maj. Gen. Lee W. Fulton, Dir. for Procurement & Production, Air Force Logistics Command Panel Discussion (DOD and Industry Moderators):

DOD Participants: (at all five cities)

Hon. Kenneth E. Belieu
Hon. Daniel M. Luevano
Hon. Robert H. Charles
Closing Remarks (Industry Moderators):
Speakers:

April 29.

harles F. Horne, President, General Dynamics/Pomona, at Los Angeles, March 4. D. Hackley, Vice President, Kaiser Industries Corp., at New York, March 17.

Joseph A. Chambers. Vice President & General Manager, Military Electronics Div., Motorola, Inc., at Chicago, April 1. Marion L. Hicks, Vice President, General Dynamics/Fort Worth, at Dallas, April 15.

Harvey Gaylord, President, Bell Aerospace Corp., at Washington,

DOD STANDARDIZATION PROGRAM EXPECTS BIG ACHIEVEMENTS

Many outstanding achievements are expected in the coming months as a result of the new organization established in June 1964 by Secretary of Defense McNamara for the direction and modernization of the Department of Defense Standardization Program as well as for the whole area of technical data.

Called the Office of Technical Data & Standardization Policy the new organization, which is located in the Office of the Assistant Secretary of Defense (Installations & Logistics), is headed by Brigadier General A. T. Stanwix-Hay, formerly Deputy Chief Signal Officer of the Army and prominent in the development of Secretary of Defense Project 60. His deputy is Colonel O. C. Griffith, USAF, for

(Cont. on Page 28)



FROM THE SPEAKERS ROSTRUM

Excerpt from an address by Hon. Norman S. Paul, Asst. Secretary of Defense (Manpower), to the Society for Personnel Administration, Washington, D. C., Oct. 28, 1964.

DOD Program for Employment Stability

In all of these changes (resulting from base closures), a broad, sustained effort is being made to plan ahead to ease the impact on individuals and provide them with continuing job opportunities. While the disruptive nature of these extensive adjustments is such that we have no delusions that hardships for some individuals have not resulted or that every employee is satisfied with the outcome of our placement efforts, we do believe the Department has reason to take pride in its overall accomplishments.

We have two basic objectives in mind in all of our efforts:

First, we want to make the maximum possible use of such vacancies as do occur within the Department of Defense to offer positions to career employees whose positions are being eliminated. We want to be certain before bringing in a new employee for any position that we cannot use that position to continue in employment a qualified displaced defense career employee who desires to remain in the Federal service.

Second, we want to use all of the facilities of the Department of Defense to reach our goal, not just those of one military department or defense agency. All the employees affected by these changes are, for this purpose, defense employees; not Army employees or Navy employees, or Air Force employees.

In evolving our plans and programs to achieve these objectives we have developed a comprehensive set of principles and procedures, which we call our program for employment stability.

Of these basic principles, perhaps the most important is that of advance planning and consideration of the personnel effects of changes in mission and organization. With advance planning and adequate lead time we are able to take the following

important steps to find other positions for affected employees:

- —Hiring of permanent employees can be discontinued both at the affected activity and other DOD activities. As turnover occurs, the employees in the activity being phased out can be reassigned to continuing positions and if necessary their positions filled by temporary or term appointees.
- —Employees can be given adequate notice of what is happening to their jobs and of what alternatives are open to them. In major reductions, we require a 90-day notice, with a minimum of 60 days in a pay status.
- —Reductions can be phased so that masses of employees need not be separated at one time, thereby avoiding the peaks that make it so difficult to absorb them in other positions. Most of the 96 base closures, reductions, or consolidations announced December 12, 1963 and April 12, 1964 are being phased over one to three years for this reason.
- —Other defense activities, Federal agencies, and private industries can be encouraged to use the installation being phased out as a recruitment source. Since consolidations and closeouts are phased over a considerable period of time, many employees receive job offers through the cooperation of the personnel officers of other Federal agencies throughout the period of the phase-out.
- —Retraining programs can be established for employees who cannot be placed in their pres ent skills but who can be placed, with a reasonable amount of retraining, in another job category. Although we have not as yet exploited retraining possibilities as fully as we would like, the Department has had some successful experiences. Mechanics, for example, have been retrained in a variety of skills, such as supply management, inventory control, and the maintenance of inertial guidance systems.

Making certain that vacancies are used to the maximum extent possible for the placement of affected employees presents a formidable adminis-

trative task in an organization as large as the Department of Defense. We are continually seeking ways to improve our techniques of matching jobs and people and, at present, are experimenting with the use of computers in that process.

In substance, our present procedure involves a series of sequential steps, each widening the area of placement consideration, although in some larger base closure actions all avenues of placement may be brought into play at once.

First, the activity being closed or substantially reduced is required to develop a phased placement plan, showing at what times what numbers of employees will be transferred to what locations, what numbers of jobs will have to be found for affected employees, and what retraining, if any, will be undertaken. As one of the first steps in this plan, full information concerning the reduction is given to employees, employee organizations and interested local groups, and plans are made for use of the placement services of State Employment Offices. In major base closures, a team of headquarters officials visits the affected base shortly after the announcement to meet with employees and management officials to discuss plans for finding other positions for the employees affected. These visits we have found do much to avoid the panic and fear of the future which understandably grips many employees when a base closure or reduction announcement is made. When employees realize that we do not intend to abandon them, that officials from the Secretary of Defense on down are concerned about their future, and that we do have working programs designed to find them another job opportunity, hope for the future is visibly restored.

Second, employees whose jobs are being transferred to new locations are identified and given the opportunity to transfer with their jobs. Those who do not wish to do so are not abandoned. We give these employees priority placement rights in the areas in which they are willing to accept employment. However, those employees who severely limit themselves as to location, as I am sure you are aware, continue the most difficult placement problem and often cannot be placed.

Third, the installation and the military department or defense agency concerned determines whether it will be able to accomplish any necessary reductions by attrition and by reassignment of employees within its own activities. This step may or may not involve a "freeze" on hiring at other activities, depending on the magnitude of the

problem.

Fourth, all other defense activities in the commuting area are supplied with the names and other placement information on surplus career employees who may be separated because of reduction in force or failure to accompany a function. The names of these employees are entered upon the reemployment priority list of each such activity, immediately below the names of employees of that activity, and they are all extended reemployment priority rights.

Fifth, the installation may invoke our defensewide Regional Placement program when it is determined that assistance outside the department affected is required. The essential features of this program are:

- —The country is divided into ten regions which coincide with the ten Civil Service Regions in the United States, and each military department and major defense agency has designated a coordinator for the region.
- —The losing activity, as a first step, advises other defense activities and coordinators in the region of the types and number of skills it expects to be releasing. Those activities then send weekly lists of vacancies to the losing activity and use that activity as a prime recruitment source.
- —The losing activity determines what types of jobs each affected employee is qualified to perform, and the locations and grades he is willing to accept within the region. Resumes or applications are then forwarded to installations where vacancies exist or there is a reasonable expectation of future vacancies.
- —Position vacancies at installations receiving applications referred under this procedure are "frozen" in the sense that appointments or transfers may not be made from outside an installation's parent department or agency, except from such referred applications. In severe circumstances, further restrictions on the filling of positions by internal movement of personnel can be and are imposed.
- —When positions are located for an employee at another DOD activity, if a move outside the commuting area is involved, special funds have been established to assure that the Department pays the expenses of transporting the employee, his family and household effects, to the new location.

These are the basic features of our present program.

* * * * * * * * * * * *

Excerpts from Address by Hon. Paul R. Ignatius, Under Secretary of the Army, before Association of U.S. Army Meeting, Nov. 18, 1964.

* * * * * * * *

Improvement in Definition of What we Want from Industry

Paralleling the formation of the Army Materiel Command was the establishment of CDC, the Combat Developments Command. It is the important responsibility of this command to look into the future and determine the Army's qualitative materiel requirements and the associated organization and doctrine for employment of new capabilities, equipment and weapons systems. The Army Materiel Command then translates these requirements into the necessary hardware, and the Continental Army Command trains units and individuals in the new doctrine for employment of the hardware so as to form an effective fighting force.

Our Army reorganization should be a long step toward improving the definition of what we need from industry. The Army—and industry—can now look to CDC for a statement of long range future requirements. . . .

In addition to improving our organization, we have also taken other steps to improve our definition of what we want from industry. One such step was the extended use of CDEC, the Combat Development Experiment Center located at Fort Ord, California, CDEC is an arm of CDC and is. in essence, an operations research laboratory where we can evaluate with real people and real equipment new tactics and the performance of new weapons. CDEC is more and more providing us with empirical data on matters of great importance, for example, the effect of armed helicopters against tanks, or the effectiveness of small arms against low flying aircraft. With data of this kind. we can define our requirements with greater confidence and inform you of our needs with a greater degree of certainty. We are also in a position to do a better job of evaluating unsolicited proposals from industry, or suggestions made by using elements in the Army. The importance of this is evident when one realizes that about half of our new items originate from these two sources. . . .

A major step in defining what we need is PDP, the Project Definition Phase, with which many of you are familiar. The purpose of PDP is to fully definitize technical characteristics, estimate costs with greater assurance, and determine cost-effectiveness relationships with greater precision

before taking the expensive step of committing concepts to hardware. PDP helps us to know more accurately what we want to buy, and lets the contractor know more accurately what we expect of him. Accordingly, we are able to make better contracts, with clearly defined performance expectations and firmer pricing arrangements at the outset of the effort.

While we have made, I believe, much progress, there are nevertheless problems which remain. First, PDP helps us to refine what we believe we want, but we need to do a better job of defining our needs before the PDP phase. The fact that we receive so many ideas which we do not want is an indication that we are not determining our needs adequately or are not informing you adequately of what our true needs are. We also need to improve our own techniques for costeffectiveness analysis so as to lay proper emphasis upon those programs that truly provide a quantum improvement. With respect to PDP itself, we must ensure that we conduct project definition in an effective manner so that unnecessary delays are avoided and the full opportunities of the techniques are realized. . . .

Quality Control and Reliability

. . . Reliable, trouble-free performance of its equipment has always been a matter of importance to the Army, but it is far more important today. First, the Army today has much more equipment per man than it used to have, and if we are to avoid tying up an inordinate number of troops in the maintenance function, we must have maintenance-free, rather than maintenanceprone equipment. Secondly, the Army today is expected to be able to respond rapidly to contingencies that may arise in the world. You can't respond rapidly if your equipment is down, and you can't fight successfully if you have to stop and make repairs. For both these reasons, then, quality control and reliability are of overriding importance to the Army.

... We must see to it that we in the Army and you in industry place proper emphasis on reliability and maintenance. These objectives are not so glamorous as the gun which shoots farther or the plane which flies faster. But it is entirely possible in a given instance that we would derive more combat benefit from an improvement in reliability or maintainability than from farther or faster performance. We will not achieve these improvements, however, unless we place the necessary emphasis on their need. . . .

We ask you, then, to join with us in finding ways to improve the quality, reliability, and maintainability of our equipment. You have found ways to do this is commercial practice and in many military applications and I have no doubt that we can continue to show progress.

* * * * * * * * * * *

MILITARY EXPORTS BRING BIG RETURNS

From November 1962 to November 1964 orders amounting to over \$3 billion were received by the U.S. Government or U.S. Industry from over 35 nations around the world.

If your company has not participated at all, or fully, in this growth, the following information should be of extreme interest to you.

The DOD organization primarily concerned with Government/Industry efforts to promote military exports is the Office of International Logistics Negotiations (ILN), headed by Deputy Assistant Secretary of Defense for International Security Affairs Henry J. Kuss, Jr. This office is responsible for planning and negotiating logistics arrangements with foreign countries and international organizations in the development, coordination and execution of DOD plans and programs for maximizing military exports to friendly nations within overall U.S. national policy.

Mr. Kuss is also Chairman of the Committee on Military Exports of the Defense Industry Advisory Council, which is composed of key members of Industry and Government who provide a forum for the exchange of views on promoting, negotiating and supporting the export of U.S. military products. In this capacity, he advises the Secretary of Defense and his principal management assistants on ways and means of accomplishing our export objective through Government and Industry efforts.

As to organization, the ILN office is broken down into teams as shown on the accompanying list. Each professional specializes in certain countries and, as a "team" member, also works across the board in a functional capacity. For example, a company representative who seeks general information as to how his firm might fit into the military export operation would contact Mr. Peter Feigl, Director of Multi-Country Industry Cooperation (Gray Team); whereas inquiries for specific information regarding exports to Germany would be directed to Mr. H. J. Gownley, Director Multi-Country Procedures (White Team), or a member of the White Team.

OFFICE OF INTERNATIONAL LOGISTICS NEGOTIATIONS, OASD(ISA)

Mr. L. R. Felker	OX-79323	Canada, Sweden, Denmark, Norway
MULTI-COUNTRY		1101
DURES (WHITE		C
Mr. H. J. Gownley, Director	OX-56944	Germany
Mr. G. A. Chadwick,	OX-76271	Germany
Jr.		•
Lt. Col. C. C. Cross- white	OX-76271	Germany
Mr. L. Tosti, Jr.	OX-76271	Germany
MULTI-COUNTRY		G 02 01101-19
(BLUE TEA		
Mr. F. J. Fede, Director	OX-77483	Italy
Mr. E. Reeves	OX-78397	Argentina, Brazil,
mr. E. Reeves	OV-10991	Venezuela, Chile, Peru
Mr. L. A. Cain	OX-75278	Spain, Belgium,
•	·•-·	Netherlands,
		Commercial
Mrs. C. Clay	OX-75278	Ecuador, Mexico,
	012 10210	Colombia,
		Unlisted
MULTI-COUNTRY	INDUSTRY	Omnstea
COOPERATION (GR		
	OX-77896	U. K., Switzerland,
Director	011 11000	Austria, Iran
Mr. C. G. Stevens	OX-77887	Israel, Lebanon,
	011 11001	Saudi Arabia,
		Iraq, Jordan
Mr. J. K. Hoenig	OX-77887	India, Turkey,
		Greece, Pakistan
		22000, 2 011150011

Top 50 R&D Contractors FY 1964

- 1. North American Aviation. Inc.
- 2. General Dynamics Corp. 3. Lockheed Aircraft Corp.
- 4. Western Electric Co.
- 5. The Boeing Co.
- 6. Martin Marietta Corp.
- 7. General Electric Co.
- 8. Aerojet-General Corp.
- 9. United Aircraft Corp.
- 10. Pan American World Airways, Inc.
- 11. Avco Corp.
- 12. Hughes Aircraft Co.
- 13. Sylvania Electric Products, Inc.
- 14. Westinghouse Electric Corp.
- 15. Douglas Aircraft Co., Inc.
- 16. Philco Corp.
- 17. Ling-Temco-Vought, Inc.
- 18. Radio Corporation of America
- 19. Sperry Rand Corp.
- 20. General Motors Corp.
- 21. Thiokol Chemical Corp.
- 22. Raytheon Co.
- 23. Space Technology Laboratories, Inc.
- 24. International Electric Corp.
- 25. The Bendix Corp.

- 26. Hercules Powder Co.
- 27. ARO, Inc.
- 28. General Precision, Inc.
- 29. Atlantic Research Corp.
- 30. International Telephone & Telegraph Co.
- 31. Honeywell, Inc.
- 32. Vitro Corporation of America
- 33. International Business Machines Corp.
- 34. Grumman Aircraft Engineering Co.
- 35. Bell Aerospace Corp. 36. American Bosch Arma
- Corp.
- 37. Burroughs Corp.
- 38. Northrop Corp.
- 39. Texas Instruments, Inc. 40. Litton Systems, Inc.
- 41. Goodyear Aerospace
- Corp. 42. Fairchild Camera &
- Instrument Co.
- 43. Collins Radio Co.
- 44. Sanders Associates, Inc.
- 45. The Garrett Corp.
- 46. Melpar, Inc.
- 47. Thompson-Ramo Wooldridge, Inc.
- 48. McDonnell Aircraft Corp.
- 49. Curtiss-Wright Corp.
- 50. Ralph M. Parsons Co.

DIAC Meets To Hear Progress Reports

The ninth regular meeting of the Defense Industry Advisory Council (DIAC) will be held in Washington, D. C. on January 29 and 30, 1965, under the chairmanship of Deputy Secretary of Defense Cyrus R. Vance.

The agenda for the meeting will be devoted primarily to a review of the progress of Council subcommittees and working groups engaged in studying the following subjects: "DOD Directive on Source Selection:" "Contractor Independent Technical Effort (CITE);" "Role of the Audit Function in Procurement;" "Effect of Interest Cost on Leasing Facilities and Related Matters;" "Utilization of Contract Support Services:" "Regulations and Contract Clauses;" "Military Exports;" and "Joint Industry/Defense Training."

Additionally, the Council will hear a discussion of actions to be taken as a result of the industry paper on "Cost Principles" along with reports on the "Field Test and Refinement of Competitive Planning and Progress Reporting System;" on the status of the "DOD Economic Impact Project;" and on the second phase of the study on "Structure and Dynamics of the Research and Development Industry."

The DIAC was established in the Spring of 1962 to provide a means for direct contact between the Secretary of Defense and his principal management assistants and top level representatives of industry and to serve as a focal point for the review and discussion of problems of mutual interest to industry and DOD.

While there are only 22 regu-

DOD Consolidates Contract Audit Units

On December 12, 1964, Secretary of Defense Robert S. McNamara announced the consolidation of contract audit units of the military departments to which 3,600 personnel are now assigned. The new agency, to be known as the DOD Contract Audit Agency, will be under the staff supervision of the Assistant Secretary of Defense (Comptroller) and headed by a director of two star or comparable civilian rank.

This action is related to the consolidation of contract administration functions accomplished last year. The consolidation has been recommended by independent accounting consultants and the Defense Industry Council.

Secretary McNamara listed the following advantages of establishing the Contract Audit

Agency: (1) Uniformity of management, policy direction and resource utilization; (2) More responsive objectives and consistent contract audit advice to procurement personnel; (3) Defense contractors and government agencies are provided a single point of contact for their procurement activities: (4) Elimination of the need to switch contract audit responsibility between military services when preponderance of contractors work shifts from one military department to another; (5) Enhancement of career training and development opportunities for contract auditors; and (6) A saving of \$1.8 million a year through a reduction of 180 personnel required for this function. These manpower services will be achieved solely by normal attrition and not by reduction in force.

lar industry members on the Council, dozens of knowledgeable people from industry management have served and continue to serve along with officials from the Department on Council subcommittees or working groups appointed to make assigned studies and otherwise provide advice and assistance in finding reasonable solutions to many vexing Industry-Government relationship problems.

The Deputy Secretary of Defense is the permanent Chairman of the Council. Paul R. Ignatius, Assistant Secretary of Defense (Installations and Logistics), is Alternate Chairman. Dr. Ruben F. Mettler of TRW Space Technology Laboratories is Industry Vice Chairman. Samuel W. Crosby, Assistant to the Deputy Secretary of Defense, is Executive Secretary.

DEFENSE R&D EXPANDS WORK WITH ALLIES

During the past two years Department of Defense (DOD) has undertaken to expand the scope of cooperation in research and development (R&D) with friendly foreign countries. The policies, objectives and criteria are contained in DOD Directives No. 3100.3 and 3100.4, September 27, 1963.

The Office of the Assistant Director (International Programs) in the Office of the Director of Defense Research & Engineering, headed by Mr. Ronald M. Murray, and the R&D offices of the Military Departments are working together in the implementation of the above mentioned directives. Generally, the procedure being followed is:

1. An overall government-togovernment bilateral agreement is signed at the Defense Secretary level outlining the terms and conditions of cooperative R&D.

(Cont. on Page 18)

(Cont. from Page 17)

2. A bilateral R&D Steering Committee, consisting of three officials from each government, is established to negotiate and resolve over-all policies and review long range planning. Unresolved matters and important decisions may be referred to the Defense Secretary/Minister for

approval. 3. The Steering Committee delegates responsibility for conducting technical negotiations to a Senior National Representative of the respective military department or other appropriate agency. Frequently, whenever a specific project is under consideration, each government will also appoint a technical repre-

sentative.

Thus far, overall R&D bilateral agreements have been signed with Federal Republic of Germany, United Kingdom and Italy. The following joint R&D project agreements have been initiated during the past year:

Federal Republic of Germany

(1) 1970 Main Battle Tank; (2) Heavy Equipment Transporter; (3) U. S. Assistance in Federal Republic of Germany development of a lightweight V/STOL fighter and associated avionics equipment; (4) Joint testing and evaluation of U. S. XC-142, X-19 transports and Federal Republic of Germany DO-31 transport and VJ-101C fighter aircraft; and (5) Miniature Inertial Navigation System for Ships.

France

Information exchange programs providing for the U.S. evaluation of the French Mirage III-V V/STOL Fighter and the French Brequet 941 STOL Transport in exchange for U.S. information on the TF-30 engine which France may require for the Mirage III-V.

United Kingdom

(1) Cooperation in the use of Beryllium in aircraft engines; (2) P-1127 V/STOL Aircraft.

Italy

Several Air Force projects are under consideration.

ROSTER OF OFFICE OF ASST. SECRETARY OF DEFENSE (PUBLIC AFFAIRS)

	,,	
Honorable Arthur Sylvester	_2E800	79312
Deputy Asst Secretary/Nils A. Lennartson		53381
Mil Asst/Capt. Hugh M. Robinson, USN	2E789	59032
Spec. Asst./Orville E. Splitt		
Spec. Asst. for South Viet Nam/Col. R. R.		10040
Bankson	2E780	72873
Exec. Asst./Major C. S. Weaver	2E100	79143
Administrative Control Officer/Russell Griffin	-2E000 9F701	56993
Ch Media Accreditation & Tours/LtCol	_219191	00000
R. P. Taffe	_2D757	76005
	- 2 D101	10000
Directorate for Plans and Programs		
Dir/Col Chas F. Heasty, Jr.	_2E776	71346
Dep Dir/John C. Kirby	2E776	71347
Army Member/Col John K. Eney	2E777	71311
Navy Member/Capt Robert H. Mereness	2E777	
AF Member/Col Bill Fendall	_2E777	59558
Asst Air Force Member/Lt Col D. C. Mahoney_		
DOD Member/Hunt Clement		54265
DOD Member/ Hunt Clement	_214 (04200
Directorate for Information Services		
Dir/William E. Odom	_2E765	59082
Dep Dir (Audio-Visual)/Robert Harvey		
Dep Dir (News)/Captain Walter J. Ellis, USN_	2E765	
Staff Assistant/Frank Falatko	2E765	
Defense News Branch/John H. Sullivan (Acting)	2E757	
Armed Services News Br/Lt Col C. G. Furbish_		
Mag and Book Br/Lt Col C. V. Glines, Jr.	2D768	71740
Pub Inquiries Br/Peter A. Erickson		
Radio-TV News Br/Norman Hatch		75111
News Photo Br/Maj Francis N. Satterlee		
Motion Pic Prod Coop/Donald Baruch	2D775	
•		14000
Directorate for Community Relations		
Dir/Col J. B. Cross	_2E772	52113
Dep Dir/Eugene J. Sleevi	_2E772	52113
Natl Organizations Div/Col R. A. Carr		
Vets Activities Br/Lt Col F. T. Huray		
Civic Activities Br/Lt Col Edw Ellis	_2D765	53227
Womens Activities Br/Frances Nelson	_2D774	54965
Business & Labor Div/Col E. C. Gibson	_2E813	
Business Br/Lt Col Sheldon Hicks	_2E813	52709
Labor Br/Wm Welsh	_2E813	$_{-}52036$
Projects Div/Capt O. S. Burnette	_2E773	74170
Sp Asst/Wm G. McNamara Events Br/Maj Ron Everett	_2 E773	75016
Events Br/Maj Ron Everett	_2E773	56795
Bands & Troops/Lt Col Anne Sweeney	_2E773	74985
Speakers Br/David A. Smith	_2E773	$_{-2}73157$
Program Br/Maj M. K. Chase	_2E773	76368
Directorate for Security Review		
	117771	74995
Dir/Charles W. Hinkle		74006
Dep Dir/Roger Delaney	_IE//I	14020
Asst Dir Policy & Procedure/Willis D.	1 17/21	74760
LawrenceAsst Dir Security/John E. Carland	10771	74769
ASSI DIT Security/John E. Carland	1E/(I	14100 14100
OSD Div/Col Thompson M. Colkitt	1E/00	79115
Army Div/Col Kenneth B. Stark	_1D/04 1D761	10110 79716
Navy Div/Capt J. A. MontgomeryAir Force Div/Col Jonathan Leet	112704 117761	75/50
An Force Div/Corbonathan Leet	_115/04	10400



BIBLIOGRAPHY

The following recently published directives and instructions of the Department of Defense (DOD) may be of interest to the Defense Industry:

DOD Instruction 5010.13, "Technical Data and Standardization Management," Dec. 28, 1964. This instruction implements the DOD Technical Information Program by bridging the interface between the Scientific and Technical Information Program and the Technical Logistics Data Information Program. It implements the Defense Standardization Program with respect to responsibility for this program and provides for management of technical data and standardization programs relating to development, procurement, supply, training, operations or maintenance activities. It delineates responsibilities and sets forth relationships among the participating offices of the Secretary of Defense on a functional basis.

The provisions of this instruction apply to the full technical and logistics cycles from exploratory development through production, distribution, use, maintenance, and disposal of military items.

Its provisions cover the coordination and prescribe relationships between the DOD Scientific and Technical Information Program, the DOD Technical Logistics Data and Information Program, and the DOD Standardization Program.

DOD Directive 5105.33, "Armed Forces Radiobiology Research Institute (AFRRI)." Nov. 20, 1964. Establishes mission, functions and manning of AFRRI.

DOD Directive 3005.2, "Non-Industrial Facilities for Mobilization," Dec. 7, 1964. Establishes a program (1) to assure that existing non-industrial facilities (hotels, motels, resort area facilities, educational institutions, hospital, office buildings, and other real estate that can be used for military purposes) not under control of the DOD will be available for military preparedness purposes in event

of mobilization; and (2) to reduce DOD requirements for new construction to greatest extent practicable and to provide facilities in a minimum period of time in event of such military mobilization.

DOD Directive 4215.18, "Management of Defense-Owned Industrial Plant Equipment (IPE)," Dec. 10, 1964. Establishes policies and assigns responsibilities for the management of DOD-owned IPE inventories and prescribes procedures for reporting such inventories to Defense Industrial Plant Equipment Center, Defense Supply Agency.

DOD directives and instructions may be obtained from: Publications Distribution Branch Office of the Secretary of Defense Room 3B940, The Pentagon, Washington, D.C. 20301

Defense Procurement Circular No. 16, Nov. 17, 1964. June 1964 Edition of Certain Standard Contract Forms; and New Small Business Status Protest Procedure. Defense Procurement Circular No. 17, Nov. 23, 1964. Interim Instructions Concerning Fringe Benefits Payments Under Construction Contracts; Changes in Defense Supply Agency Assignments of Responsibilities for Handling Contractor Plant Equipment Inventories; and Revision of Standards for Responsible Prospective Contractors (ASPR 1-903.2).

Defense Procurement Circular 18, Nov. 27, 1964. Extension of Mandatory Date for Certain Standard Forms.

Defense Procurement Circular No. 19, Nov. 30, 1964. Value Engineering (Expedited Implementation of DPC No. 11 and Revision of ASPR 1-1707.1 and 1-1708); Extension of Mandatory Date of Certain Standard Forms; Equal Employment Opportunity; and Certification of Independent Price Determination.

DOD circulars may be ordered from Superintendent of Documents, United States Government Printing Office, Washington, D. C. 20402.

DOD Consolidates Traffic Management Terminal Service

The Secretary of Defense recently announced the formation of a new Military Traffic Management and Terminal Service (MTMTS) to regulate surface transportation of military cargo and personnel within the continental United States, and to manage all military ocean terminals except those used by the Navy in support of the fleet.

The new organization consolidates the management and operation of military traffic, land transportation, and commonuser ocean terminals under the Secretary of the Army as a

single manager. It will be jointly staffed under an Executive Director who will report directly to the Secretary of the Army.

This consolidation does not include air terminal operations which will continue as an integral function of the Military Air Transport Service, nor will it effect that portion of the operation of the Navy's tidewater installations which involve fleet support. It will, however, involve ocean terminal activities which are used by more than one service and which can be provided at these tidewater installations.

Under the new organization, (Cont. on Page 21)

NOTES FOR EDITORS

The "Notes for Editors" pages in this Bulletin will be a regular feature. Our purpose is to keep the editors of industry house organs advised of what we think are worthwhile projects, innovations and occurrences within the Department of Defense (DOD) which would make interesting articles. Items will appear in capsule form with their highlights and significance stressed.

The function of assisting the magazine and book media at the national level on Armed Forces and DOD matters was recently consolidated into a single unit under the Assistant Secretary of Defense for Public Affairs. The purpose of the consolidation was two-fold: to effect economy of operations and to give better

service to publishers, editors and writers through a centralized operation.

In general, we are prepared to assist industry magazine editors with any project which concerns the DOD. The specific services provided to industry publication editors by the Magazine and Book Branch include the following:

- —Answering specific queries for detailed information.
- —Suggestions and advice on developing defense article ideas.
 - -Limited research assistance.
- —Photographic materials for use as article illustrations.
- —Arranging interviews with DOD personnel at seat of Government.
- —Unclassified background briefings for writers and editors.

Due to research and printing lead time, picture requests normally take about two and one-half weeks to fill. However, pictures dealing with current defense news generally can be forwarded the day of your request.

In addition to the services listed above, a monthly Magazine and Book Newsletter is prepared and distributed to interested writers, editors and publishers. If you are not receiving our Newsletter and would like to be placed on the mailing list, please forward your request to:

Chief,
Magazine and Book Branch
OASD(PA)
Rm 2E765A, Pentagon
Washington D. C. 20301

RESEARCH IN COMPUTER FIELD

The major Air Force agency performing research in the computer field is a Rome Air Development Center (RADC), Griffiss AFB, N. Y. RADC is sponsoring approximately \$1 million annually in computer research and development, which is the responsibility of the Data Processing Section of the Center, headed by Mr. Alan R. Barnum. RADC also coordinates computer research performed by other Air Force organizations: the Electronic Systems Division and Space Systems Division of the Air Force Systems Command and the Air Force Cambridge Research Laboratories of the Air Force Office of Aerospace Research.

Exercise Polar Strike Is Scheduled

Exercise POLAR STRIKE is scheduled for January and February 1965 in the interior of Alaska. The exercise will be held in the area east of Northway, Tetlin and Delta Junction in the Mount Fairplay and Mount Harper area. Actual field operations will be conducted from February 4–17.

Purpose of the exercise is to evaluate plans for reinforcement of the Alaskan Command by elements of the U. S. Strike Command and for continued operations in Alaska. In addition, it will assist in the evaluation and development of procedures for the command and control of joint forces and provide information on cold weather opera-

tions and testing equipment under Arctic conditions.

POLAR STRIKE will involve Headquarters, Alaskan Command and units of the Alaskan Air Command; U. S. Army, Alaska; U. S. Strike Command; and Army and Air Force elements of the Canadian Armed Forces.

WALLEYE IN PDP PHASE

On December 15, 1964, the Navy announced selection of the following three companies to proceed with the modified Project Definition Phase (PDP) WALLEYE Production: Hughes Aircraft, Martin, and North American (Columbus). Industry response to this modified PDP is scheduled for mid-July 1965.

Project WALLEYE is a television guided glide bomb.

CALENDAR OF EVENTS

WEST COAST WINTER CONVENTION ON MILITARY ELECTRONICS, Los Angeles, Calif., Feb. 3-5.

American Business Press Assn. 14th ANNUAL STATE OF THE NATION DINNER, Shoreman Hotel, Washington, D. C., Feb. 4.

ARMY FIREPOWER DEM-ONSTRATION, Ft. Sill Okla., Feb. 20.

Iron Gate Squadron, Air Force Assn. AIR FORCE BALL, Waldorf Astoria Hotel, New York, N. Y., Feb. 22.

NATIONAL SECURITY IN-DUSTRIAL ASSN. MEETING, Key West, Fla., Feb. 24-26.

RESERVE OFFICERS ASSN. MID-WINTER CON-FERENCE, Washington, D. C., Feb. 24-27.

COLORADO SOCIETY OF ENGINEERS CONVENTION, Denver, Colo., Feb. 26-27.

DIPEC

(Cont. from Page 4)

tory control, uniform equipment coding, recording and reporting.

- Preparing reports and analyses for the Secretary of Defense and Military Services.
- Procuring general purpose type industrial plant equipment when agreed upon with the Military Services. (DIPEC is not procuring at this time. A long range study to determine requirements was initiated when the Center was activated and it was anticipated that it would take at least two years to complete this study.)
- Conducting the industrial plant equipment portion of the

AMERICAN CONCRETE INSTITUTE MEETING, San Francisco Calif., March 1-4.

SOCIETY OF PLASTIC ENGINEERS MEETING, Boston, Mass., March 2-5.

STEEL FOUNDERS SOCI-ETY OF AMERICA CONVEN-TION, Chicago, Ill., March 8-9.

National Space Club, GOD-DARD MEMORIAL DINNER, Sheraton-Park Hotel, Washington, D. C., March 19.

CAPABILITIES OF ARMY AIRCRAFT DEMONSTRATION, Ft. Sill, Okla., March 20.

INSTITUTE OF ELECTRICAL & ELECTRONIC ENGINEERS MEETING, New York, N. Y., March 22-25.

National Security Industrial Assn. FORRESTAL DINNER, Washington, D. C., March 25.

NATIONAL ASSOCIATION OF PLASTIC FABRICATORS CONVENTION, Las Vegas, Nev., May 18-22.

Defense Standardization Program.

• Performing the redelegated statutory responsibilities of the Secretary of Defense with respect to the Industrial Plant Equipment portion of the National Industrial Reserve Act of 1948.

DIPEC has technical direction over 11 central storage facilities. These facilities store, repair, rebuild, preserve and/or test Department of Defense-owned industrial plant equipment.

The address for the Center is: Defense Industrial Plant Equipment Center, Defense Depot Memphis, Tenn., 38102; telephone: Area Code 901, 458-4411.

BUSINESS OPPORTUNITY FAIR ANNOUNCED

The Defense General Supply Center (DGSC), Richmond, Va., which is responsible for procuring supplies for the Military Services, will hold its Business Opportunity Fair at the Center May 12 through 14.

The Center, a field activity of the Defense Supply Agency, is commanded by Rear Admiral J. S. Dietz. It procures furniture, food preparation equipment, recreation and athletic equipment, office supplies, and a number of other items.

During the fair, which falls within Armed Forces Week, DGSC will display thousands of items in the general supplies category which it expects to be purchasing in the coming year, together with specifications, drawings and descriptions. Small Business advisers, along with engineering and quality control technicians, will be on hand to offer counsel.

Details may be secured by writing the Director, Procurement and Production Directorate, Defense General Supply Center, Richmond, Va. 23212

TRAFFIC MANAGEMENT

(Cont. from Page 19)

transportation procedures will be greatly simplified because one agency will be responsible for each shipment from point of origin to the terminal, in the case of air shipments, and through the terminal in the case of ocean shipments.

These changes and the elimination of three ocean terminals are providing an annual savings of \$14.1 million.



DEFENSE PROCUREMENT

Contracts of \$1,000,000 and over awarded during month of December 1964:

DEFENSE SUPPLY AGENCY

- 1—Texaco, Inc., New York, N. Y. \$1,789,200. 13,020,000 gallons of aviation gasoline. Defense Fuel Supply Center, Washington, D. C.
- 4—General Aniline & Film Corp., Binghamton, N. Y. \$1,668,317. 84,062 packages of radiographic film for use by the Armed Forces. Binghamton. Defense Medical Supply Center, Brooklyn, N. Y.
- 7—Raylon Fabrics, Inc., New York, N. Y. \$1,865,062. 1,225,000 yards of cloth. Lancett, Ala. and Westerly, R. I. Defense Clothing & Textile Supply Center, Philadelphia, Pa.
- —Burlington Industries, Inc., New York, N. Y. \$2,200,824. 1,472,000 yards of cloth. Cooleemee, N. C. Defense Clothing & Textile Supply Center, Philadelphia, Pa.
- —J. P. Stevens & Co., Inc., New York, N. Y. \$1,103,062. 730,500 yards of cloth. Wallace, S. C. and Roanoke Rapids, N. C. Defense Clothing & Textile Supply Center, Philadelphia, Pa.
- —Texas City Refining, Inc., Texas City, Tex. \$1,530,900. 11,340,000 gallons of aviation gasoline. Defense Fuel Supply Center, Washington, D. C.
- —Socony Mobile Oil Co., Inc., New York, N. Y. \$1,118,-250. 8,400,000 gallons of aviation gasoline. Defense Fuel Supply Center, Washington, D. C.
- 9—Texaco, Inc., New York, N. Y. \$7,761,000. 58,800,000 gallons of aviation gasoline. Defense Fuel Supply Center, Washington, D. C.
- 10—General Cable Corp., New York, N. Y. \$4,809,825.
 91,009 reels of telephone cable. Providence, R. I.
 Defense Industrial Supply Center, Philadelphia, Pa.
- 11—Sinclair Refining Co., New York, N. Y. \$1,150,800. 8,400,000 gallons of aviation gasoline. Defense Fuel Supply Center, Washington, D. C.
- 15—C. M. London Co., New York, N. Y. \$1,419,392. 853,000 yards of cotton cloth. Lewiston, Maine and Bradford, R. I. Defense Clothing & Textile Supply Center, Philadelphia, Pa.
- 16—Delta Petroleum Co., Inc., New Orleans, La. \$1,101,095. 2,875,250 gallons of lubricating oil. Defense Fuel Supply Center, Washington, D. C.
- 21—Shell Oil Co., New York, N. Y. \$2,562,000. 16,800,000 gallons of aviation gasoline. Defense Fuel Supply Center, Washington, D. C.
 - —Standard Oil of California, San Francisco, Calif. \$1,908,900. 12,600,000 gallons of aviation gasoline. Defense Fuel Supply Center, Washington, D. C.
- 22-Eastman Kodak Co., Rochester, N. Y. \$2,578,226. 34,500
- CODE: A. Date B. Company C. Dollar Value D. Material E. Location Work Performed F. Contracting Agency

- rolls of aerial film. Rochester. Defense General Supply Center, Richmond, Va.
- 29—Burlington Industries, Pacific Mills Div., Halifax, Va. \$1,072,727. 283,900 yards of wool cloth. Raeford, N. C., and Halifax and Clarksville, Va. Defense Clothing & Textile Supply Center, Philadelphia, Pa.
- 30—E. I. DuPont de Nemours & Co., Inc., Wilmington, Del. \$1,138,226. 1,038,455 gallons of solvent. Niagara Falls, N. Y. Defense Fuel Supply Center, Washington, D. C.
 - —Pembroke, Inc., Egg Harbor City, N. J. \$2,356,509. 98,434 men's wool coats. Egg Harbor City. Defense Clothing & Textile Supply Center, Philadelphia, Pa.

ARMY

- 1—E. J. Albrecht Co., Chicago, Ill. \$6,224,825. Deepen and widen the channel at Turtle Creek Flood Protection Project. Wilmerding and Monroeville Boroughs and North Versailles Township, Allegheny County, Pa. Pittsburgh Engineer Dist., Pittsburgh, Pa.
- 2—General Electric Co., Burlington, Vt. \$2,862,000. 72 M12 Vulcan Pods. Burlington. Boston Procurement Dist., Boston, Mass.
- 4—Dondlinger & Sons Construction Co., Wichita, Kan. \$13,640,666. Construction of an Enlisted Men's Barracks Complex. Ft. Leonard Wood, Mo. Dist. Corps of Engineers, Kansas City, Mo.
- -Thomas Construction Co. Inc., St. Joseph, Mo. \$1,244,600. Construction equipment training facility. Ft. Leonard Wood, Mo. Dis. Corps of Engineers, Kansas City, Mo.
- Albion Malleable Iron Co., Albion, Mich. \$3,319,624.
 2 75-inch rocket components. Hillsdale, Mich. Ammunition Procurement Supply Agency, AMC, Joliet, Ill.
- General Electric Co., Burlington, Vt. \$2,800,000. XM-12
 Vulcan Pods. Burlington. Procurement Dist., AMC, Boston, Mass.
- —Malan Construction Co. of Koppers Co., Inc., New York, N. Y. \$8,079,003. Construction of a rocket engine test stand. The NASA Mississippi Test Facility. Army Corps of Engineers, Mobile, Ala.
- 8—C. F. Bean, Inc., Plaquemine, La. \$1,571,550. Flood control work on the Mississippi River and tributaries project. Berwick, St. Mary Parish, La. U. S. Army Engineer Dist., New Orleans, La.
- 9—Ford Motor Co., Fort Motor Div., Dearborn, Mich. \$1,804,538. 465 tractor trucks. Louisville, Ky. Army Tank Automotive Center, AMC, Warren, Mich.
- —Chrysler Motor Corp., Detroit, Mich. \$1,264,644. 625 cargo pickup trucks. Warren, Mich. Army Tank Automotive Center, AMC, Warren, Mich.
- 10-Smith & Sapp Construction Co., Orlando, Fla. \$1,342,629. Construction of flight crew facility. Merritt Island, Fla. Canaveral Engineer Dist., Merritt Island, Fla.
- 11—Kaiser-Jeep Corp., South Bend, Ind. \$14,656,248. 1,139 5-ton trucks. South Bend. U. S. Army Mobility Command, AMC, Warren, Mich.

- 15—Peter Kiewit Sons' Co., Vancouver, Wash. \$2,964,412. Grading and excavation work at John Day Lock and Dam Project. Denton County, Wash. Dist. Corps of Engineers, Walla Walla, Wash.
 - —H. L. Bishop, Inc., Distrian Gravel Corp. and Peter Distrian, Long Island, N. Y. \$2,717,670. Construction work at Fire Island Inlet to Montauk Point Beach Erosion and Hurricane Project. Long Island, N. Y. Dist. Corps of Engineers, New York, N. Y.
 - -Midwest Construction Co., Nebraska City, Neb. \$1,009,656. Rehabilitation and stone construction work at Sabine-Neches Waterway Project. Port Arthur, Tex. Dist. Corps of Engineers, Galveston, Tex.
 - —Scovill Mfg. Co., Waterbury, Conn. \$1,338,621. Metal parts for bombs. Waterbury. Procurement Dist., AMC, Boston, Mass.
- 16—Mike Hooks, Inc., Lake Charles, La. \$1,979,155. Enlargement of a channel of the Calcasieu River and Pass Project. Lake Charles. Engineer Dist., New Orleans, La.
- 17—Rubin Construction Co., West Palm Beach, Fla. \$1,812,705. Excavation work at the Cross Florida Barge Canal Project. Dunnellin, Fla. Dist. Corps of Engineers, Jacksonville, Fla.
 - —Bell Aero Systems Co., a div. of Bell Aerospace Corp., Buffalo, N. Y. \$1,510,000. Fire control sighting equipment for helicopters. Buffalo. Frankford Arsenal, AMC, Philadelphia, Pa.
- 18—Olin Mathieson Chemical Corp., Winchester Western Div., East Alton, Ill. \$2,425,500. 7.62-mm cartridges. East Alton. Frankford Arsenal, AMC, Philadelphia, Pa.
 - -Fullerton Construction Co., Sacramento, Calif. \$1,630,000. Construction at the NASA Test Facility. Hancock County, Miss. Dist. Corps of Engineers, Mobile, Ala.
 - —AVCO Corp., Electronics Div., Cincinnati, Ohio. \$2,607,245. Operation, modification and maintenance of missile tracking and instrumentation radars and interfacing equipment. White Sands, N. M.; Green River, Utah; Blanding, Utah; and Fort Wingate, N. M. The Missile Range, AMC, White Sands, N. M.
 - —General Electric Co., Burlington, Vt. \$1,305,800. Armament subsystems for helicopters, repair parts and inspection equipment. Burlington. Procurement Dist., AMC, Boston, Mass.
- 21—Allis Chalmers Mfg. Co., York, Pa. \$4,058,085. Design, manufacture, test, and delivery of a 46,000-horse-power hydraulic turbine and associated equipment. Manufacture of equipment at York and installation at Robert S. Kerr Lock and Dam, Sallisaw, Okla. Tulsa Dist. Corps of Engineers, Okla.
 - —Chrysler Motor Corp., Dearborn, Mich. \$1,131,221. 415 trucks. Dearborn, Mich.; Paris, Ill.; and Montpelier, Ohio. Army Tank Automotive Center, AMC, Warren, Mich.
 - -Ford Motor Co., Dearborn, Mich. \$1,373,444. 301 dump trucks. Louisville, Ky. Army Tank Automotive Center, AMC, Warren, Mich.
- 22--Intercontinental Mfg. Co., Inc., Garland, Tex. \$1,302,-134. PERSHING missile motor cases. Garland. Redstone Arsenal, AMC, Huntsville, Ala.
 - -Dravo Corp., Pittsburgh, Pa. \$22,035,208. Excavation and construction work at Lock and Dam No. 6 at the

- Arkansas River and Tributaries Project. Little Rock, Ark. U. S. Army Engineer Dist., Little Rock, Ark.
- —Arthur Venneri, East Westfield, N. J. \$3,039,800. Construction of a clinical research building. U. S. Army Edgewood Arsenal, Md. Baltimore Engineer Dist.
- -Kaiser Jeep Corp., Toledo, Ohio. \$1,998,491. 548 2½-ton cargo trucks with government furnished engines. South Bend, Ind. U. S. Army Mobility Command, AMC, Warren, Mich.
- —Westinghouse Electric Corp., Surface Div., Baltimore, Md. \$1,793,390. Development and installation of a complete UHF/VHF cross section measurement system. Baltimore. U. S. Army Electronics Command, AMC, Fort Monmouth, N. J.
- 23.—Thiokol Chemical Corp., Bristol, Pa. \$1,134,456. Signal pellets and rocket motors. Longhorn Army Ammunition Plant, Marshall, Tex. Ammunition Procurement & Supply Agency, AMC, Joliet, Ill.
 - --Day & Zimmerman, Inc., Philadelphia, Pa. \$5,989,548. Loading, assembling, and packing of ammunition and miscellaneous components. Lone Star Army Ammunition Plant, Texarkana, Tex. Ammunition Procurement & Supply Agency, AMC, Joliet, Ill.
 - Mine Safety Appliance Co., Pittsburgh, Pa. \$2,694,369.
 Protective field masks, filter elements, and repair parts. Esmond, R. I. U. S. Army Edgewood Arsenal, AMC, Md.
 - —Johnson Furnace Co., Bellevue, Ohio. \$2,064,600. 2,700 1½-ton cargo trailers. Army Tank Automotive Center, AMC, Warren, Mich.
 - —Hyde Construction Corp. and Thornton Construction Co., Inc., Gulf Port, Miss. \$1,789,617. Construction of roads, parking area and truck-rail weighing facility at NASA Mississippi Test Facility. Hancock, Miss. Engineer Dist., Mobile, Ala.
 - —Guy H. James Construction Co., Oklahoma City, Okla. \$1,699,045. Construction and excavation work at the Webbers Falls Lock and Dam Project. Arkansas River, Okla. Tulsa Engineer Dist., Okla.
 - —Chamberlain Corp., Scranton, Pa. \$4,561,410. 155mm projectile parts. Scranton, Pa. Ammunition Procurement & Supply Agency, AMC, Joliet, Ill.
 - —Olin Mathieson Chemical Corp., Winchester Western Div., New Haven, Conn. \$10,387,500. 7.62mm cartridges. U. S. Army Frankford Arsenal, AMC, Philadelphia, Pa.
 - —Ford Motor Co., Dearborn, Mich. \$2,774,663. 1,043 stake and platform trucks. Wayne, Mich. Army Tank Automotive Center, AMC, Warren, Mich.
 - —Ford Co., Dearborn, Mich. \$1,271,915. 230 tractortrucks. Louisville, Ky. Army Tank Automotive Center, AMC, Warren, Mich.
 - —International Harvester Co., Washington, D. C. \$1,453,711. 266 various types of trucks. Springfield, Ohio; Birmingham, Ala.; Chattanooga, Tenn.; Brooklyn, N. Y.; Paris, Ill.; and Fort Wayne, Ind. Army Tank Automotive Center, AMC, Warren, Mich.
- 24—Bulova Watch Co., Jackson Heights, N. Y. \$5,238,270. Fuzes for various projectiles. Jackson Heights. Ammunition Procurement & Supply Agency, AMC, Joliet, Ill.
 - —Bell Helicopter Co., a div. of Bell Aerospace Corp., Fort Worth, Tex. \$98,517,345. UH-1B and UH-1D helicopters. Fort Worth, Tex. U. S. Army Aviation

Materiel Command, AMC, St. Louis, Mo.

28—General Motors Corp., Truck & Coach Div., Pontiac, Mich. \$10,246,798. 850 ambulance/passenger buses. Lima, Ohio, and Koscuisko, Miss. Army Tank Automotive Center, AMC, Warren, Mich.

—Carpenter Bros., Dallas, Tex. \$1,159,000. Construction of a mobile equipment maintenance building at the NASA Mississippi Test Facility. Hancock County,

Miss. Dist. Corps of Engineers, Mobile, Ala.

Dynalectron Corp., Washington, D. C. \$2,508,377. Services performed in the installation, operation, and maintenance of government-owned data-collecting facilities.
 White Sands Missile Range. White Sands Missile Range, AMC, N. M.

- -Radio Corp. of America, RCA Service Co.div., Camden, N. J. \$1,131,100. Personnel, vehicles, spare parts, and equipment required for installation, operation, maintenance, repair and removal of communication systems and supporting facilities. White Sands and Fort Wingate, N. M.; and Green River and Blanding, Utah. White Sands Missile Range, N. M.
- -Telecomputing Services, Inc., Panorama City, Calif. \$1,199,873. Data reduction reports on missiles and test vehicles. White Sands, N. M. White Sands Missile Range, N. M.
- —Collins Radio Co., Cedar Rapids, Iowa. \$5,978,511.
 Communication sets (AN/ARC-102) and ancillary equipment for air-ground communications. Cedar Rapids. Chicago Procurement Dist., AMC, Chicago, Ill.
- 29—Umpqua River Navigation Co., Reedsport, Ore. \$1,244,600. Repair of a jetty at the mouth of the Columbia River. Astoria, Ore. Dist. Corps of Engineers, Portland, Ore.
- 30—Technical Operations, Inc., Burlington, Mass. \$2,130,000. Research and scientific studies. Ft. Belvoir, Va. Procurement Dist., AMC, Boston, Mass.
 - —Snodgrass & Sons Construction Co., Inc., Wichita, Kan. \$1,247,476. Construction of four docks for fighter aircraft maintenance. McConnell AFB, Wichita, Kan. Army Engineer Dist., Kansas City, Mo.

—International Harvester Co., Washington, D. C. \$1,803,784. 420 school buses. Highpoint, N. C., and Fort Valley, Ga. Army Tank Automotive Center, AMC,

Warren, Mich.

—Trinity Construction Co., Inc., Houston, Tex. \$2,319,502.
Drainage, excavation and construction work at Buffalo Bayou, Tex., Project. Houston. Dist. Corps of Engineers, Galveston, Tex.

—Amron Corp., Waukesha, Wis. \$9,849,500. Components for the 155mm projectile. Waukesha; Port Huron, Mich.; and other locations. Ammunition Procurement

& Supply Agency, AMC, Joliet, Ill.

—AVCO Corp., Ordnance Div., Richmond, Ind. \$9,631, 143. 155mm projectile components. Richmond; Detroit,
 Mich.; and other locations. Ammunition Procurement
 & Supply Agency, AMC, Joliet, Ill.

—Honeywell, Inc., North Hopkins, Minn. \$6,267,910. 155mm shell components. New Brighton, Minn.; Riverside, Calif.; and other locations. Ammunition Procurement & Supply Agency. AMC, Joliet, Ill.

31—FMC Corp., New York, N. Y. \$2,326,566. Production of items at the Newport Army Chemical Plant. Newport, Ind. Ammunition & Procurement & Supply Agency, AMC, Joliet, Ill.

—Terminal Construction Corp., Wood-Ridge, N. J. \$11,-400,000. Construction of 11 troop barracks and supporting facilities. Ft. Dix, N. J. Dist. Corps of Engineers, New York, N. Y.

—Piracci Construction Co., Inc., Baltimore, Md. \$4,601,-127. Construction of an academic building and an auditorium. Carlisle Barracks, Pa. U. S. Army Engi-

neer Dist., Baltimore, Md.

—Chrysler Motor Corp., Detroit, Mich. \$1,367,736. 315 trucks of various types. Milwaukee, Wis., and Parris, Ill. Army Tank Automotive Center, AMC, Warren, Mich.

- --Honeywell, Inc., Hopkins, Minn. \$1,944,000. Research and development of ammunition. Hopkins. Picatinny Arsenal, AMC, Dover, N. J.
- —General Steel Tank Co., Inc., Reidsville, N. C. \$1,226,485. Portable fuel supply systems. Reidsville. U. S. Army Mobility Equipment Center, AMC, St. Louis, Mo.
- --Chamberlain Corp., Scranton, Pa. \$7,188,536. Metal parts for 175mm projectiles. Scranton Army Ammunition Plant. Ammunition Procurement & Supply Agency, AMC, Joliet, Ill.
- —Raytheon Co., Lexington, Mass. \$1,165,373. Inspection, assembly and modification of HAWK items. Ft. Bliss, Tex. U. S. Army Missile Command, AMC, Redstone Arsenal, Huntsville, Ala.
- —General Motors Corp., Allison Div., Indianapolis, Ind. \$6,154,170. Transmissions for 155mm howitzers, 8-inch howitzers, and light armored 'recovery vehicles (LARV). Indianapolis. Cincinnati Procurement Dist., AMC, Cincinnati, Ohio.
- —Bell Aerospace Corp., Bell Aerosystems Co. div., Buffalo, N. Y. \$4,385,110. Fabrication and incorporation of improvements into Visual Airborne Target Locator Systems. Buffalo. U. S. Army Electronics Command, AMC, Ft. Monmouth, N. J.
- —Western Electric Co., Inc., New York, N. Y. \$1,379,188.
 Modification kits for the HERCULES missiles. Burlington, N. C. U. S. Army Missile Command, AMC, Redstone Arsenal, Huntsville, Ala.
- —F. D. Rich Co., Stanford, Conn. \$11,559,085. Construction of 12 Enlisted Men's barracks, xis company administration and storage buildings, six battalion head-quarters and classroom buildings, one regimental head-quarters building, branch post exchange, regimental gymnasium, unit chapel and support facilities. Ft. Jackson, S. C. Dist. Corps of Engineers, Savannah, Ga.
- —Atlantic Gulf & Pacific Corp., New York, N. Y. \$1,419,936. Dredging work on a section of the Chesapeake and Delaware Canal. Turkey Point and Betterton, Md. U. S. Army Engineer Dist., Philadelphia, Pa.
- —Firestone Tire & Rubber Co., Akron, Ohio. \$4,202,064. 173,424 track assembly replacement parts for combat vehicles. Noblesville, Ind. Army Tank Automotive Center, AMC, Warren, Mich.

NAVY

- 1—R. M. Wells Co., Inc., Quanah, Tex. \$1,557,000. Improvements and alterations to Benmoreell Housing. Naval Station, Norfolk, Va. Bureau of Yards & Docks through Dir., Atlantic Div.
- 3—Westinghouse Electric Corp., Baltimore, Md. \$1,314,589. Missile control systems for F-4B aircraft. Balti-

- more, Bureau of Naval Weapons,
- —Sperry Piedmont Co., Div. of Sperry Rand, Charlottesville, Va. \$3,620,000. Pre-production models and production units of a stabilized gyro master compass control cabinet. Charlottesville. Bureau of Ships.
- 4—Raytheon Co., Portsmouth, R. I. \$2,975,000. Material and services required to modify sonar systems installed aboard submarines. Portsmouth. Bureau of Ships.
- —TRG, Inc., Melville, N. Y. \$2,380,589. Developmental program to demonstrate the feasibility and potential of an advanced type of sonar system for use aboard naval ships. Melville. Bureau of Ships.
- —Hughes Tool Co., Aircraft Div., Culver City, Calif. \$1,050,000. Completion of research and development on 20mm aircraft gun mounts, Mk-4. Culver City. Bureau of Naval Weapons.
- —Hughes Tool Co., Aircraft Div., Culver City, Calif. \$9,568,350. Production of Mk-4 gun pods. Culver City. Bureau of Naval Weapons.
- -Raytheon Co., Lexington, Mass. \$1,104,414. Engineering services and flight testing in connection with the SPARROW III missile program. Flight testing at Oxnard, Calif., and remainder of work at Bedford, Mass. Bureau of Naval Weapons.
- —Teletype Corp., Skokie, Ill. \$1,046,732. Teletype equipment. Skokie. U. S. Navy Purchasing Office, Washington, D. C.
- —Kaman Aircraft Corp., Bloomfield, Conn. \$1,757,462.
 Spare parts for the UH2A/B helicopter aircraft.
 Bloomfield, U. S. Navy Aviation Supply Office, Philadelphia, Pa.
- —General Electric Co., Heavy Military Electronics Dept., Syracuse, N. Y. \$1,511,154. Developmental program to demonstrate the feasibility and potential of an advanced type of sonar system for use aboard naval ships. Syracuse. Bureau of Ships.
- —General Dynamics/Electronics, Rochester, N. Y. \$1,-682,101. Developmental program to demonstrate the feasibility and potential of an advanced type of sonar system. Rochester. Bureau of Ships.
- 7—Westinghouse Electric Corp., Underseas Div., Baltimore, Md. \$1,098,800. Mk 48 torpedoes. Baltimore. Bureau of Naval Weapons.
- —Contromatics Corp., Rockville, Conn. \$1,745,607. Hull and back-up valves and related parts for the submarine program. Rockville. U. S. Navy Ships Parts Control Center, Mechanicsburg, Pa.
- -TRW Space Technology Lab., Redondo Beach, Calif. \$6.1 million. Services necessary to perform systems analysis, integration engineering, test support, technical support and engineering evaluation for the Manager, Antisubmarine Warfare Systems Project Office, Office of Naval Material. Contractor facilities in Los Angeles, Calif., and Washington, D. C., and at Navy Field facilities. Dept. of the Navy.
- 10—Pratt & Whitney Aircraft Div., United Aircraft Corp., East Hartford, Conn. \$1,800,418. Spare parts for J52/ 4P and 06A aircraft engines used on A-4E (SKY-HAWK) and A-6A (INTRUDER) aircraft. East Hartford. Aviation Supply Office, Philadelphia, Pa.
 - —A. J. Kellos Construction Co., Inc., Augusta, Ga. \$1,-002,180. Construction at the Fleet Ballistic Missile

- Submarine Training Center, U. S. Naval Base. Charleston, S. C. Southeast Div., Bureau of Yards & Docks.
- —C. R. Fedrick, Inc., Novato, Calif. \$1,570,000. Construction of an Air Force Air Defense Command fighter dispersal facility. Siskiyou County Airport, Calif. Dist. Public Works Officer, Bureau of Yards & Docks.
- —Sperry Gyroscope Co., Marine Div., Syosset, N. Y. \$1,-900,000. Engineering services in the overhaul of inertial navigation subsystem equipment aboard nuclear powered fleet ballistic missile submarines. Various shipyards throughout the country. Bureau of Ships.
- —Sperry Rand Corp., Syosset, N. Y. \$1,284,650. Navigation subsystem equipments for installation in POLARIS submarines. Sub-contractor plants located throughout the United States. Bureau of Ships.
- —Pratt & Whitney Aircraft Div., United Aircraft Corp., East Hartford, Conn. \$1,029,748. Cylinder assemblies for the R4360-63A aircraft engine on the C-124C cargo transport aircraft. East Hartford. Aviation Supply Office, Philadelphia, Pa.
- 11—Maxson Electronics Corp., Long Island, N. Y. \$1,210,-125. AQM-37 supersonic targets for missile firings. Old Forge, Pa. U. S. Navy Purchasing Office, Washington, D. C.
- 14--Pascoe Steel Corp., Pomona, Calif. \$1,231,756. 54 pontoon assemblies. Columbus, Ga. and Pomona. Navy Purchasing Office, Los Angeles, Calif.
 - —General Dynamics Corp., Pomona, Calif. \$3,515,988. TERRIER/TARTAR missile program. Pomona. Bureau of Naval Weapons.
 - —North American Aviation, Inc., Autonetics Div., Anaheim, Calif. \$2,993,662. Modification and repair of mechanical assemblies, parts and components of Fleet Ballistic Missile Submarine ship inertial navigation system (SINS) equipment. Anaheim. Bureau of Ships.
 - —Sperry Gyroscope Co., Syosset, N. Y. \$1,846,763. Field engineering services during installation and checkout of navigation equipment aboard nuclear submarines. Various shipyards throughout the country. Bureau of Ships.
- 15--American Construction Co., Inc., Washington, D. C. \$1,970,000. Construction of a sector focusing cyclotron building at the U. S. Naval Research Lab. Washington, D. C. Area Public Works Officer, Chesapeake, Bureau of Yards & Docks.
 - —Collins Radio Co., Richardson, Tex. \$1,642,340. Six microwave sets for naval shore stations, engineering services, spare parts and associated technical manuals. Richardson. Bureau of Ships.
- 17—Sperry Rand Corp., Sperry Gyroscope Div., Syosset, N. Y. \$1,919,000. Engineering services on Ships Inertial Navigation System (SINS) equipment on fleet ballistic missile submarines. Shipyards throughout the United States. Bureau of Ships.
 - —Stewart Warner Electronics Div., Stewart-Warner Corp., Chicago, Ill. \$2,601,096. Navigational sets and spare parts for Navy and Air Force aircraft. Chicago. U. S. Navy Purchasing Office, Washington, D. C.
 - —Arthur A. Johnson, New York, N. Y. \$1,137,620. Construction of a fleet ballistic missile replenishment facility at the U. S. Naval Station. Newport, R. I. Dist. Public Works Officer, First Naval Dist., Bureau of Yards & Docks.

- —Dyson & Co., Inc., Pensacola, Fla. \$1,281,252. Construction of an aircraft hangar at the U. S. Naval Air Station. Pensacola. Dir., Southeast Div., Bureau of Yards & Docks.
- —Daley Corp., San Diego, Calif. \$1,189,000. Construction of a parking apron and helicopter landing pads at the Naval Auxiliary Air Station, Ream Field. Imperial Beach, Calif. Dir., Southwest Div., Bureau of Yards & Docks.
- 18—Marinette Marine Corp., Marinette, Wis. \$1,656,200. 52 steel-hulled, 56-foot, medium landing craft (LCM). Marinette. Bureau of Ships.
 - —Ling-Temco-Vought, Inc., LTV Aerosystems Div., Greenville, Tex. \$1,322,503. Classified work on Navy aircraft. Greenville. Bureau of Naval Weapons.
 - —Knapps-Stiles, Inc., Grand Rapids, Mich. \$2,727,000. Construction of 200 family housing units. Naval Air Station, Alameda, Calif. Dist. Public Works Officer, Twelfth Naval Dist., Bureau of Yards & Docks.
 - —Electronics & Missile Facilities, Inc., Valley Stream, N. Y. \$7,150,000. Construction of a hospital, heating plant, and barracks at the U. S. Naval Hospital. Long Beach, Calif. Dir., Southwest Div., Bureau of Yards & Docks.
 - -General Electric Co., Heavy Military Electronics Dept., Syracuse, N. Y. \$2,602,530. Development of major modification kit for installation on the sonar of the USS WILKINSON (DL-5). Syracuse. Bureau of Ships.
 - —National Steel & Shipbuilding Co., San Diego, Calif. \$36,848,000. Construction of two Combat Store Ships (AFS 4 and 5). San Diego. Bureau of Ships.
- 21—Bendix Corp., Mishawaka, Ind. \$2,500,000. Materials for procurement of TALOS missile guidance control and airframes. Mishawaka. Bureau of Naval Weapons.
 - —Raytheon Co., Lexington, Mass. \$1,627,000. Data converters for TARTAR missile control radar sets. Wayland, Mass. Bureau of Naval Weapons.
- 22—United Aircraft Corp., Sikorsky Aircraft Div., Stratford, Conn. \$13,368,000. SH-3A SEA KING helicopters. Stratford. Bureau of Naval Weapons.
 - —Specialities, Inc., Charlottesville, Va. \$2,543,117. Approach compensators used for throttle control on carrier-based aircraft. Charlottesville. Navy Purchasing Office, Washington, D. C.
 - —Pratt & Whitney Aircraft Div., United Aircraft Corp., East Hartford, Conn. \$4,119,807. Spare parts for TF-33 aircraft engines. East Hartford. U. S. Navy Aviation Supply Office, Philadelphia, Pa.
- 23—Philco Corp., Communications & Weapons Systems Div., Philadelphia, Pa. \$3,721,956. SIDEWINDER missiles. Philadelphia. Bureau of Naval Weapons.
- —Lockheed Missile & Space Co., Sunnyvale, Calif. \$19,-432,798. Tactical engineering services for the POLARIS missile system. Sunnyvale. Special Projects Office.
 - —University of California, Berkeley, Calif. \$1,812,921.
 Continuation of a program of oceanographic studies.
 Office of Naval Research.
 - —University of Alaska, College, Alaska. \$1,250,000. Continuation of an Arctic research program. Arctic Research Lab., Point Barrow, Alaska, and at field stations. Office of Naval Research.
- 28-General Electric Co., Schenectady, N. Y. \$3,388,793.

- Design and furnishing of nuclear reactor components. Schenectady. Bureau of Ships.
- —Sperry Rand Corp., Sperry Gyroscope Co., Div., Great Neck, N. Y. \$2,936,200. Integrated navigation systems for installation aboard APOLLO tracking ships. Great Neck. Bureau of Ships.
- —Westinghouse Electric Corp., Baltimore, Md. \$6,000,000. Design and development of a missile guidance system. Baltimore. Bureau of Naval Weapons.
- —Alcan-Pacific Co., Sacramento, Calif. \$2,427,000. Construction of 160 family housing units. Naval Post Graduate School, Monterey, Calif. Dist. Public Works Officer, Twelfth Naval Dist. Bureau of Yards & Docks.
- —Westinghouse Electric Corp., Washington, D. C. \$1,-498,000. A retrofit of a SSBN for a POLARIS launcher system. Sunnyvale, Calif. Special Projects Office.
- —Westinghouse Electric Corp., Washington, D. C. \$2,-253,300. A POLARIS launcher system for the United Kingdom. Sunnyvale, Calif. Special Projects Office.
- —Dynalectron Corp., Paradyn Div., Washington, D. C. \$1,126,607. Data processing and related technical work on data obtained from test of missile components. U. S. Naval Ordnance Lab., Corona, Calif. U. S. Navy Purchasing Office, Los Angeles, Calif.
- 29—General Electric Co., Schenectady, N. Y. \$14,868,207.

 Design and furnish nuclear reactor components.

 Schenectady. Bureau of Ships.
- 30—McDonnell Aircraft Corp., St. Louis, Mo. \$40,750,000. F-4D PHANTOM aircraft for the Air Force. St. Louis. Bureau of Naval Weapons.
 - United Aircraft Corp., Pratt & Whitney Aircraft Div.,
 East Hartford, Conn. \$4,385,953. Spare parts for TF-33-P7 engines. East Hartford. U. S. Navy Aviation
 Supply Office, Philadelphia, Pa.
 - —Sperry-Piedmont Co., div. of Sperry-Rand, Charlottesville, Va. \$3,498,155. Target control system and spare supporting components for the DASH program. Charlottesville. U. S. Navy Purchasing Office.
 - Raytheon Co., Space & Information Systems Div., Sudbury, Mass. \$3,337,962. Manufacture of POLARIS Mk
 electronic guidance assemblies. Waltham, Mass. Special Project Office.
 - —General Dynamics/Pomona, Calif. \$13,050,000. Development and pilot production of a medium range standardized version of a TARTAR/TERRIER type surface-to-air missile. Pomona. Bureau of Naval Weapons.

AIR FORCE

- 1—Lockheed-Georgia Co., Marietta, Ga. \$1,075,853. Production of C-130E aircraft for the Military Assistance Program. Marietta. Aeronautical Systems Div., AFSC, Wright-Patterson AFB, Dayton, Ohio.
- —Garret Corp., Phoenix, Ariz. \$1,725,112. Aircraft engine starters and data for their installation in F-4C and RF-4C aircraft. Phoenix. Aeronautical Systems Div., AFSC, Wright-Patterson AFB, Dayton, Ohio.
- —Lear Siegler, Inc., Grand Rapids, Mich. \$1,085,172. Engine instrumentation systems for C-141A aircraft. Grand Rapids. Aeronautical Systems Div., AFSC, Wright-Patterson AFB, Dayton, Ohio.
- 2—Space-General Corp., El Monte, Calif. \$1,350,000. Design, fabrication, and testing of satellite payloads. El Monte. Electronics Systems Div., AFSC, Hanscom

- Field. Mass.
- —Radio Corp. of America, New York, N. Y. \$1,310,370.
 Work on a voice communication switching system.
 New York. Electronics System Div., AFSC, Hanscom Field, Mass.
- 4—American Electric, Inc., Paramount, Calif. \$1,362,072. Production of 25-pound practice training bombs. Spring City, Tenn., and Paramount. Ogden Air Materiel Area, AFLC, Hill AFB, Utah.
 - —Sperry Rand Corp., Phoenix, Ariz. \$1,236,227. Production of components and related material for the C-12 gyroscopic compass system. Phoenix. Aeronautical Systems Div., AFSC, Wright-Patterson AFB, Dayton, Ohio.
- —Lockheed Missiles & Space Co., Sunnyvale, Calif. \$3,-180,000. Work on the GEMINI program target vehicle system. Sunnyvale. Space Systems Div., AFSC, Los Angeles, Calif.
- —Laboratory for Electronics, Inc., Boston, Mass. \$4,504,-140. Production of doppler radar set components, spare parts, and related equipment. Danvers, Mass. Aeronautical Systems Div., AFSC, Wright-Patterson AFB, Dayton, Ohio.
- —Geotechnical Corp., Garland, Tex. \$2,101,442. Classified project. Garland. Aeronautical Systems Div., AFSC, Wright-Patterson AFB, Dayton, Ohio.
- —Hughes Aircraft Co., Culver City, Calif. \$1,300,000. Integration of the FALCON missile with F-4 PHANTOM series aircraft. Culver City. Aeronautical Systems Div., AFSC, Wright-Patterson AFB, Dayton, Ohio.
- —Boeing Co., Seattle, Wash. \$4,500,000. Research, development, test and engineering work on MINUTE-MAN. Patrick AFB, Fla., and Seattle. Ballistic Systems Div., AFSC, Norton AFB, San Bernardino, Calif.
- -Rand Corp., Santa Monica, Calif. \$13,780,000. Aerospace research services. Santa Monica, Air Force Office of Scientific Research, Washington, D. C.
- —Analytical Services, Inc., Alexandria, Va. \$1,300,000. Analytical studies concerning weapon systems in strategic, tactical, air defense, and logistic operations for the Air Force. Fairfax County, Va.
- 7—Hayes International Corp., Birmingham, Ala. \$1,683,316. Inspection and repair as necessary of C-97F aircraft. Birmingham. Oklahoma City Air Materiel Area, AFLC, Tinker AFB, Okla.
- —North American Aviation, Inc., Los Angeles, Calif. \$1,112,324. Modification kits for F-100 aircraft. Los Angeles. Sacramento Air Materiel Area, AFLC, McClellan AFB, Calif.
- 9—Ling Temco Vought, Inc., Greenville, Tex. \$1,175,000.

 Navigation systems and related equipment for RC135B aircraft. Greenville. Aeronautical Systems Div.,
 AFSC, Wright-Patterson AFB, Dayton, Ohio.
- —AVCO Corp., Stratford, Conn. \$42,839,548. T-53 aircraft engines and related material for Army and Navy aircraft. Stratford. Aeronautical Systems Div., AFSC, Wright-Patterson AFB, Dayton, Ohio.
- -Northrop Corp., Hawthorne, Calif. \$4,242,000. F-5A/B aircraft program. Hawthorne. Aeronautical Systems Div., AFSC, Wright-Patterson AFB, Dayton, Ohio.
- 10—B. F. Goodrich Co., Akron, Ohio. \$1,468,580. Replacement tires for F-100, F-102 and F-106 aircraft.

- Akron. Ogden Air Materiel Area, AFLC, Hill AFB, Utah.
- —Sylvania Electric Products, Inc., Mountain View, Calif. \$4,614,000. Electronics portion of countermeasures equipment. Santa Cruz, Calif. Electronics Systems Div., AFSC, L. G. Hanscom Field, Bedford, Mass.
- 11—Giannini Controls Corp., Caldwell, N. J. \$1,360,000. Flight loads data recorders for F/RF-4 aircraft. Caldwell. Aeronautical Systems Div., AFSC, Wright-Patterson AFB, Dayton, Ohio.
 - —Lockheed Aircraft Corp., Marietta, Ga. \$4,184,691.
 Spare parts for C-141A aircraft. Marietta. Aeronautical Systems Div., AFSC, Wright-Patterson AFB, Dayton, Ohio.
- 15—Aerojet General Corp., Azusa, Calif. \$3,500,000. Design, manufacture, and provision of radiometric equipment. Azusa. Space Systems Div., AFSC, Los Angeles, Calif.
- 16—Aerojet General Corp., Sacramento, Calif. \$2,744,000. Research and development for the TITAN III transtage engine. Sacramento. Ballistic Systems Div., AFSC, Norton AFB, San Bernardino, Calif.
 - Aerojet General Corp., Sacramento, Calif. \$1,500,000.
 Research and development for Stage II MINUTEMAN motors. Sacramento. Ballistic Systems Div., AFSC, Norton AFB, San Bernardino, Calif.
 - —Standard Mfg. Co., Dallas, Tex. \$1,111,580. Lift trucks. San Antonio Air Materiel Area, AFLC, Kelly AFB, Tex.
 - —Douglas Aircraft Co., Inc., Missile & Space Systems, Santa Monica, Calif. \$4,000,000. THOR space boosters. Santa Monica. Space Systems Div., AFSC, Los Angeles, Calif.
- 18—Westinghouse Electric Corp., Baltimore, Md. \$26,683,424. Low frequency communication sets. Baltimore. Electronic Systems Div., AFSC, L. G. Hanscom Field, Bedford, Mass.
 - —Hazeltine Corp., Little Neck, N. Y. \$1,072,540. Communications equipment, spare parts, and data. Little Neck. Aeronautical Systems Div., AFSC, Wright-Patterson AFB, Dayton, Ohio.
 - —Electronic Specialty Co., Electronics Div., Los Angeles, Calif. \$1,746,175. Automatic tracking telemetry antennae. Los Angeles. Air Force Eastern Test Range, AFSC, Patrick AFB, Fla.
- 22—General Electric Co., Cincinnati, Ohio. \$5,000,000. Component improvement of J-79 turbojet aircraft engines for F-4 series and A-5 aircraft. Cincinnati. Aeronautical Systems Div., AFSC, Wright-Patterson AFB, Dayton, Ohio.
- 23—Lockheed-Georgia Co., Marietta, Ga. \$6,328,734. Spare parts for C-141A aircraft. Marietta. Warner Robins Air Materiel Area, AFLC, Robins AFB, Ga.
- 24—Battelle Memorial Institute, Columbus, Ohio. \$1,000,000. Continued operation of the Defense Metals Information Center. Columbus. Systems Engineering Group, AFSC, Wright-Patterson AFB, Dayton, Ohio.
 - —Bogue Electric Mfg. Co., Paterson, N. J. \$3,564,600. Diesel engine driven generator sets. Paterson. Sacramento Air Materiel Area, AFLC, McClellan AFB, Calif.
 - -AVCO Corp., Stratford, Conn. \$12,446,286. T-55-L-7 engines for the Army CH-47A CHINOOK helicopter

- program. Stratford. Aeronautical Systems Div., AFSC, Wright-Patterson AFB, Dayton, Ohio.
- —J. Young Construction Co., Inc., Jacksonville, Fla. \$1,-528,100. Construction of family housing units. Robins AFB, Ga. Warner Robins Air Materiel Area, AFLC, Robins AFB, Ga.
- 28—Mitre Corp., Bedford, Mass. \$8,200,000. Research, development, and experimentation in the field of command and control systems. Bedford. Electronic Systems Div., AFSC, L. G. Hanscom Field, Bedford, Mass.
- 30—Ralph M. Parsons Co., Los Angeles, Calif. \$1,034,773. Personnel subsystems, data, and trainers for TITAN II missile bases. Los Angeles. Ballistic Systems Div., AFSC, Norton, AFB, San Bernardino, Calif.
 - —Washington Aluminum Co., Inc., Baltimore, Md. \$1,-274,758. Container sets for BULLPUP missile. Enterprise, Ala. Aeronautical Systems Div., AFSC, Wright-Patterson AFB, Dayton, Ohio.
 - —Laboratory for Electronics, Inc., Boston, Mass. \$1,384,472. Repair and modification of components of F-105 radar and communications-navigations systems. Boston. Warner Robins Air Materiel Area, AFLC, Robins AFB, Ga.
 - —Fairchild Hiller Corp., Electronics Systems Div., Bay Shore, N. Y. \$4,619,999. Electronic equipment for use with aerial cameras, including spares and aerospace ground equipment. Bay Shore. Ogden Air Materiel Area, AFLC, Hill AFB, Utah.
 - —Dynamic Corp. of America, Radio Engineering Labs, Long Island City, N. Y. \$1,472,500. Communications equipment. Long Island City. Electronic Systems Div., AFSC, L. G. Hanscom Field, Bedford, Mass.
- 31—University of Michigan, Ann Arbor, Mich. \$2,222,568.
 Research and investigation of radar techniques. Systems Engineering Group, AFSC, Wright-Patterson AFB, Dayton, Ohio.
 - —Garret Corp, Phoenix, Ariz. \$2,075,000. Experimental research and development on a space power unit. Phoenix. Systems Engineering Group, AFSC, Wright-Patterson AFB, Dayton, Ohio.
 - —Space Sciences, Inc., Waltham, Mass. \$1,117,900. Production of recording equipment and related material. Waltham. Middletown Air Materiel Area, AFLC, Olmstead AFB, Pa.
 - General Electric Co., Cincinnati, Ohio. \$94,423,000.
 J79-GE-15 engines for Air Force F-4 series aircraft. Evendale, Ohio. Aeronautical Systems Div.,
 AFSC, Wright-Patterson AFB, Dayton, Ohio.
 - —General Electric Co., Cincinnati., Ohio. \$49,075,000. J79-GE-8A turbojet engines for Navy aircraft. Evendale, Ohio. Aeronautical Systems Div., AFSC, Wright-Patterson AFB, Dayton, Ohio.
 - —General Electric Co., Cincinnati, Ohio. \$10,950,000. Continuation of the C-5A (long range heavy logistics transport system) component verification and demonstrator engine program. Cincinnati. Aeronautical Systems Div., AFSC, Wright-Patterson AFB, Dayton, Ohio.
 - —General Electric Co., Cincinnati, Ohio. \$1,900,000. Project Definition Phase of the C-5A eng..... Cincinnati. Aeronautical Systems Div., AFSC, Wright-Patterson AFB, Dayton, Ohio.
 - -United Aircraft Corp., East Hartford, Conn., \$9,600,-

- 000. Continuation of he C-5A component verification and demonstrator engine program. East Hartford. Aeronautical Systems Div., AFSC, Wright-Patterson AFB, Dayton, Ohio.
- United Aircraft Corp., East Hartford, Conn. \$1,432,000.
 Project Definition Phase of the C-5A engines. East Hartford. Aeronautical Systems Div., AFSC, Wright-Patterson AFB, Dayton, Ohio.
- —Lockheed-Georgia Co., Marietta, Ga. \$6,000,000. Project Definition Phase of the C-5A system. Marietta. Aeronautical Systems Div., AFSC, Wright-Patterson AFB, Dayton, Ohio.
- —Boeing Co., Seattle, Wash. \$6,000,000. Project Definition Phase of the C-5A. Seattle. Aeronautical Systems Div., AFSC, Wright-Patterson AFB, Dayton, Ohio.
- —Douglas Aircraft Co., Long Beach, Calif. \$6,000,000.
 Project Definition Phase of the C-5A. Long Beach.
 Aeronautical Systems Div., AFSC, Wright-Patterson AFB, Dayton, Ohio.

DOD Standardization Program (Cont. from Page 12) many years a leader in the field of quality control in the Air Force.

Creation of this new office lends increased emphasis to DOD efforts to:

- 1. Develop or acquire only data necessary to support well-defined research, development, procurement, production, and operation and maintenance requirements.
- 2. Acquire data most economically and in most usable form.
- 3. Enhance future development and support of military weapons systems by devising automated retrieval and dissemination techniques to make readily available all information acquired at Government expense both to DOD agencies and to authorized members of industry and the public.

The following are two examples of some of the farreaching projects being sponsored by the Office of Technical Data & Standardization Policy:

- 1. A restatement of DOD policy governing the Defense Standardization Program is under way. The objective is to bring military standardization efforts into phase with changes in the development-procurement-production-supply-use cycle which have taken place in the last 10 years. Areas receiving attention under this project are the impact of weapon system management, development by contractors, and telescoping of the life cycle. Emphasis is being placed on the relationship of research and development, procurement, and logistic support functions to the accomplishment of standardization objectives. Responsibility for complete documentation of products and maximum use of applicable military standards is being stressed. Principal objectives are to maintain specifications current with the state of the art and to increase visibility of current items and components to designers.
- *2. The basic specification on preparation of drawings, MIL-D-70327, is being revised, with the cooperation of the Military Departments and a representative cross section of industry. Purpose of this revision is to obtain more flexibility in providing drawings which are fully adequate, but requiring only sufficient detail to meet military requirements. A direct result is expected to be a considerable overall reduction in the cost of drawings.



On the occasion of the first issue of the *Defense Industry Bulletin*, I wish to express the best wishes of the Army. I am certain that the effectiveness of the defense industry team will be enhanced by the coordination and cooperation brought about through this new medium of communications. The Army will lend its full support to keep industry informed of its requirements.

Esten all

Secretary of the Army

The Navy, as well as other branches of the Armed Forces, needs the best equipment produced at the lowest cost in order to provide the forces necessary to protect this country's principles. This is also the goal of U.S. industry which takes justifiable pride in being the backbone of our country's arsenal. The Navy is equally proud of its liaison and cooperation with industry over the years in the accomplishment of these common goals. The publication of the *Defense Industry Bulletin* will serve as an important media for the purpose of keeping defense industry informed of significant aspects related to this field of activity. It will receive the full support of the Navy Department.



Secretary of the Navy

Paul Ho.



I am pleased to have this opportunity to wish the *Defense Industry Bulletin* much success on the occasion of its first issue.

I am sure that publication of the *Bulletin* is a significant step toward keeping industry better informed about Department of Defense programs, and it will receive the full support of the Department of the Air Force.

S. S. Handin France

Secretary of the Air Force

OFFICE OF THE SECRETARY OF DEFENSE WASHINGTON, D. C. 20301

OFFICIAL BUSINESS



POSTAGE AND FEES PAID



Broader Use Of Zero Defects Type Programs Encouraged

Two Department of Defense (DOD) seminars designed to acquaint top management officials of Defense industries with the "Zero Defects" program were held recently in Washington, D. C., and San Diego, Calif.

The two one-day sessions featured presentations by top industry representatives and senior Defense Department officials and included panel discussions.

Zero Defects is a program which, through individual motivation, aims at improved product quality and the production of defect-free supplies, equipment and weapons.

The program initiated by Martin Company's Orlando Division in conjunction with U. S. Army Missile Command at Redstone Arsenal on the Pershing Missile program in January of 1962, has spread to more than 275 major defense contractors and to installations and activities of the U. S. Army and U. S. Air Force. The Defent contapply Agency and U. S. Navy are preparing to kick off their programs in the near future.

Over one million employees in the Defense Department and in defense industry are now participating in the Zero Defects program. Results reported by six major Defense contractors indicate an average reduction in overall defect rate of 47% and savings in the millions of dollars in scrap and rework.

In the keynote speech to the Zero Defects seminar held at the National Naval Medical Center, Bethesda, Md., November 17, 1964, General F. S. Besson, Jr., Commanding General, U. S. Army Materiel Command, stated, "Zero Defects is a program of inspired motivation aimed toward making members of the military and the industrial complex more quality conscious, dedicated to the goal of doing every job right the first time, and toward preventing defects as opposed to costly detection and rework."

An example of DOD interest in this program was indicated in a letter signed by Thomas D. Morris, former Assistant Secretary of Defense (Installation & Logistics) to the Military Departments and the Defense Supply Agency in which he stated, "During the py Tr I have been encouraged by the initiatiy of many Defense contractc_{1,9t}in instituting programs that Chigh pride of craftsmanstrigg among their personnel. nese programs carry such names as Zero Defects, Pride, and similar challenging identifications, and have achieved notable results in terms of both improved quality and reduction in cost of scrap and rework. Programs such as these should be instituted throughout the Defense industries."

Information on the Zero Defects program may be obtained by addressing queries to Directorate for Quality Control and Reliability, Office, Assistant Secretary of Defense (Installations & Logistics), Washington, D. C. 20301.

LASER ADVISORY GROUP FORMED

To develop a more effective LASER program, a LASER Advisory Group (LAG) has been formed at the Army Materiel Command (AMC) Headquarters in Washington, D.C. The Group is composed of key management personnel throughout the AMC complex who are responsible for the planning and execution of various parts of the Army's overall LASER Research and Development program. Its mission is to assist the AMC in achieving a well coordinated, technically sound, economically efficient LASER Research and Development program.

To achieve the best possible technical excellence in carrying out its functions, working groups will operate in specific technical fields of interest. These groups will consist of Army specialists in the fields of LASER effects, propagation, materials, high energy, countermeasures, devices, techniques, and applications,

The chairman of the LASER Advisory Group is Mr. Harold G. Blodgett, U.S. Army Materiel Command, Washington, D.C.